CONTROL POLICIES OF THE REICHSBANK

1924 - 1933

BY

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To

MY MOTHER AND FATHER

IN APPRECIATION

PREFACE

THIS investigation of the Reichsbank in the decade 1924 to 1933 is a study in central bank control. It was undertaken in the belief that our knowledge of the operation of central banks is altogether too limited to permit of broad generalizations concerning the objectives and techniques of monetary management. In spite of the introduction of stabilization funds and Treasury operations with partial control functions, central banks have been in the past, and are still to a very large extent, the institutions entrusted with monetary control. The battle is now joined between those who claim much for the management of money and those who deny to the managers either wisdom or power to achieve their ends. Too often the argument on both sides rests upon a factual background inadequate to support any valid conclusions and one is faced with the contemplation of mere assertions of personal preference. One of the best ways to discover what the objectives of monetary management may be and how they may be attained through specific control techniques is to increase our knowledge of the actual operation of central banks as they meet and deal with the problems that arise. The central bank of Germany in the decade under discussion offers unlimited possibilities for such a study.

The present study begins just as Germany, impoverished and nervous, was making fresh contact with the post-war world. Her currency had been stabilized and her Bank law rewritten; the reparations question was for the time being settled. It ends with the year 1933 when she turned her back upon international political and economic theory to embrace National Socialism. The decade covers, therefore, the beginning and the end of the Reichsbank as a free central bank endowed with certain powers over the credit life of the nation. It was my original intention to indicate in a final chapter the changes that have taken place since 1933 in the Reichsbank, the commercial banking system and the money market, and even in the concept of monetary control itself. It soon became apparent, however, that any such study must be independently conceived; for the changes in the money and credit life of Germany have been too far-reaching to be handled adequately in the space of a chapter. The material in the following pages must be read with the terminal date clearly in mind. An analysis of the Reichsbank in the Third Reich is the subject for a later volume.

My indebtedness to Dr. James W. Angell of Columbia University is greater than can be acknowledged. The study was conducted under his direction and at every point it has benefited by his criticism and suggestions. Not only am I grateful for his direct help but also for the more intangible support which came from his steady encouragement and from the example of his scholarship. The leisure to complete the manuscript was made possible through a fellowship granted by The Brookings Institution. To them, and particularly to Dr. Charles O. Hardy, I express my thanks. I am also indebted to my many friends in Germany who gave freely of their time, their libraries, and their own detailed information when the intricacies of the German banking system and of the stock exchange were beyond my unaided understanding.

MILDRED B. NORTHROP

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CHAPTER I

INTRODUCTION

The words *central bank control* have come to have a meaning that is identified with social welfare. A central bank is, by common consent, a bank endowed with a public purpose. Control, therefore, means the use of particular techniques to achieve particular ends considered desirable by the public body in which the central bank operates. Acceptance of this definition of central banking and central bank control focuses attention upon the objectives of the central bank and the possibility of attaining these objectives through manipulation of the money and credit mechanism. A central bank consciously formulating objectives considered desirable for the particular economic body in which it functions and seeking to bring about its objectives through control techniques directed toward particular ends becomes a very different institution from the pre-war conception of a central bank. I recognize the fact that whenever we discuss a problem that is connected with questions of social welfare and public policy we are entering into a controversy in which no final answer is now possible. We may never agree as to the means of attaining social welfare or even as to what constitutes social welfare but the recognition of the fact that our disagreement is grounded in a different philosophical bias at least clears the air. It gives us the advantage of seeing just what it is, basically, about which we are agreeing or disagreeing. This is no mean advantage. It is, in fact, the keystone in effective criticism of money and banking theory.

Until recently, the desirability of a central bank has been taken for granted. This uncritical acceptance of desirability is a part of our heritage from England and our admiration of the English banking system. In the light of more recent discoveries of the early manipulation of world money markets by the Bank of England we are forced to a deeper criticism of central banking itself.

In the latter years of the nineteenth century and in the early years of the twentieth, central banks were " scattered broadcast over Europe ", all more or less patterned after the Bank of England. It was assumed that what the Bank of England had been able to accomplish for the English economy could be accomplished by each central bank for its own nation. It now seems apparent, however, that the new central banks were not only patterned after the Bank of England but also that they were subjected to its dominance and to the dominance of the English money market over the money markets of the world.

The international credit regulation of the Bank of England in the pre-war period was unquestioned and unquestioning. It was a gentle manipulation of the money and credit mechanism set in terms consistent with the regulation of gold flows and capital movements. Underlying such regulation was the basic notion of the ability of gold flows to aid in the international regulation of price levels, the foreign exchanges, and the trade balance. The theory upon which the Bank of England controlled the English money market—and through it the money markets of the world—was one that developed out of the English money market and its relationship to the Bank of England. The control of the English money market was made internationally effective because of the predominant importance of pre-war London as a financial center.

The existence of credit regulation, however, either on a national or international scale was not admitted by the Bank of England in the pre-war period. The Bank's stated objectives never went beyond the maintenance of a gold supply sufficient to redeem its notes at par. Nevertheless, the existence of a well-defined international money market and the unobtrusive control exercised by the Bank of England over that market seems now to have been one of the essential conditions necessary to maintain the gold standard and the " automatic " nature of the " self-regulatory " monetary mechanism. For almost a century prior to the war, England maintained the international supremacy of her money market and backed that supremacy by consistent beliefs in free capital movements and free trade.

It was in the attempts to rebuild the gold standard after the war that structural changes of deep-rooted significance appeared in the international economy. The abortive attempts to reestablish and maintain the international gold standard between 1924 and 1933 seem now to have been the result of nostalgia for " the good old days ", rather than an attempt actually to recreate pre-war conditions which made those days possible.

As a result of the war, England lost her position of international supremacy and the Bank of England was no longer able, by controlling the English money market, to establish that pressure on the money markets of the world that was so bound up with pre-war credit regulation. Central banks were established even more rapidly than in the decade before the war and each central bank was attempting to solve independently national monetary problems. National problems, pressing for immediate solution, brought an abandonment, in whole or in part, of the basic concepts which supported the pre-war equilibrium and which had induced the comfortable belief in a self-regulatory monetary mechanism.

The effect of these post-war changes is particularly apparent in Germany. The problems connected with them are not Germany's problems. To anyone interested in central banking it is painfully apparent that any analysis of post-war changes which leads only to an attempt to recreate the pre-war interrelationships is in the nature of wish fulfillment. Central banking has become self-conscious in the last twenty years. And a part of that self-consciousness is a wish to answer the question, *What is a central bank?* We do not know. We do not know what central banking was in the pre-war period. What was the relationship of the Bank of England to the other central banks? Was the control of the Bank of England over the money markets of the world essential to the operation of the pre-war gold standard? If so, is the concept of a central bank in truth that of *a* central bank—that is, in order to obtain the maximum control of the money and credit mechanism must credit regulation be centered in one international central bank? Again we do not know.

The post-war literature on central banking is confused, young and unformed. And I suspect that a part of the confusion lies in the fact that we have become self-conscious without becoming critical. The charm of the pre-war Bank of England lay in its assumption of supreme indifference to world problems of credit regulation. Its problem was to maintain the gold value of the Bank of England note. We now speak glibly of credit regulation and of central bank control but we still maintain an attitude of indifference to the problems involved in the very words regulation and control.

Most post-war money and banking theory begins with the assumption that central banking is desirable (or inevitable), and controversy then relates to the objectives of central bank control and the possibility of achieving those objectives through certain control techniques. Should control be considered as the minimum regulation essential to "pure banking" such as the holding of reserves, the provision of discount and clearing facilities and the like? Or should it be designed to stabilize the price level, the money market, or general business conditions? Should it be interested primarily in the prevention of panics or speculation? Should it be designed to control the relationship between savings and investment? To a large extent, an evaluation of these and other conflicting objectives is impossible at the present stage of our knowledge of the actual operation of the money and credit mechanism.

The following study is not an attempt to answer all of these questions. It is, rather, a detailed study of the attempts of one nation to readjust itself to the shifting post-war scene. The very fact that one nation registered, sensitively, the effects of structural changes in international economic relationships brings the theoretical and practical problems connected with those changes into bold relief; problems—in so far as central banking is concerned—that can no longer be considered as peculiar to Germany.

Then too, this study of the Reichsbank gives sharp outline to problems of *national* central bank control. The Reichsbank was, before anything else, a national central bank preoccupied with national policies of public welfare. It was forced to assume drastic control powers to guarantee the stability of the reichsmark. From the very beginning of 1924, it formulated objectives for the German economy conceived in the broadest terms. The Reichsbank is, therefore, one of the best examples in the post-war world of a central bank conscious of its public character and willing to go to any lengths to achieve objectives which it set up as desirable. Many of the problems inherent in present money and banking controversies as to objectives and techniques confronted the Reichsbank in the early days of the post-stabilization period.

The following study is divided into two parts. Part I deals with the background of central bank control in Germany from 1924 to 1933. It is concerned primarily with an analysis of the factors that limit and condition the operation of a central bank; factors such as the Bank Act itself, the organization of the commercial banking system, and the money market. Part I also contains a short history of the economic development of Germany during the decade. Part II is a critical analysis of the control techniques of the Reichsbank from the point of view of the particular objective the technique was supposed to serve.

The problems of the techniques—the tools—of central bank control is one of the most pressing ones of central banking. Not only do we not know very much about the correct use of the tools that have already been devised, such as the discount rate, open market operations and the like, but we have not been very clever in devising new tools to meet new situations as they have arisen. The criticism of the techniques of central bank control and the recognition of the necessity of new ones are themselves a part of the post-war change that has taken place in money and banking theory. As long as the Bank of England was able to regulate the international money market, the technique developed by the Bank of England—discount policy—was inextricably bound up with the idea of central banking. What could not be accomplished through bank rate changes could not be accomplished by a central bank. The introduction of the concept of specific welfare objectives into central bank control, and the identification of these objectives with national interests, have shifted our attention to the possibility of attaining these goals through other methods of manipulating the money and credit mechanism.

The possibility of central bank control rests, in the last analysis, upon the ability to develop tools of control which can be used with skill and precision. This study is an attempt to determine, as exactly as possible, the degree of skill developed by one central bank in the use of its control techniques.

PART I

THE BACKGROUND OF CENTRAL BANK CONTROL IN GERMANY

CHAPTER II

THE REICHSBANK

THE positive provisions of the Bank law requiring the central bank to carry out certain stated aims and purposes, and the limitations placed upon its activities, give the legal framework within which the institution functions. The application of the law through the practical administration of the Bank, in the wider background of the whole economic and social body, vitalizes the empty legal form. In the Bank Act, one finds the statement of the public purpose which the central bank is supposed to carry out. One finds, however, in the Bank's efforts to carry out its purposes a new development which takes place in those purposes through time. An institution such as a central bank is constantly being refashioned by the forces which play upon it. In this chapter we are concerned only with an analysis of the legal provisions of the Bank Act, and with an analysis of the business of the Bank as it is normally carried on.

Although we are here dealing primarily with the Reichsbank in the years 1924 to 1933, after it was completely reorganized, the fact must be kept in mind that the Reichsbank had served the German nation as a central bank for almost fifty years prior to its new charter in 1924. Established in 1875 as the central bank of the new German nation, which came into existence after the Franco-German war of 1870, the Reichsbank had aided materially in the transformation of the banking system of that time into the modern and fairly uniform banking organization of 1914. Its habits and practices had impressed themselves on the German economy, and all persons (even the heads of competing private banks) spoke with pride of the Reichsbank.

The history of the Reichsbank up to 1914 is one of gradual entrenchment in its position as the predominant bank of note issue in the Empire. Of the thirty-two note-issuing banks in existence in 1875, only four retained that privilege in

1914, as successive legislation made note issue more and more unprofitable. No note-issuing bank could accept bills of exchange, nor buy and sell goods or securities on forward contract for its own account or for customers. With the exception of the Reichsbank, they could not issue notes of less than 100 mark denomination; their notes were not full legal tender; they were limited in the maximum amount of notes issued; they could not establish branches outside of state boundaries; and all of their transactions had to be given wide publicity. On the other hand, the Reichsbank was constantly strengthened. Its capital was repeatedly enlarged; it could (and did) establish branches throughout the Reich; its tax-free contingent of notes was increased. As the predominant bank of issue, the Reichsbank was the court of last resort in times of monetary stringency, and the banking system had come to depend upon the Reichsbank's cash reserve. Through its wide network of branches and its Giro clearing system, it had aided in providing the entire economy with cheap and simple banking facilities. By 1914 its struggle with the Great Banks in the money market had successfully established its supremacy as the central bank of Germany.

During the war, the Reichsbank was occupied primarily with government finance. The changes made in the Reichsbank law on August 4, 1914 were such as to relieve it of all responsibility for the stability of the currency, and to throw open the doors for bank note inflation.[1] In spite of this, the condition of the German currency in November 1918 was not much worse than that of most of the belligerent nations. The note circulation had increased from two billion marks in 1914 to 28.4 billion in November 1918, while the gold coverage of Reichs-

1 In August 1914, the Reichsbank was relieved of the obligation to redeem its notes in gold; treasury bills and bonds of the Reich with not more than three months to run were admitted as legal cover for notes in circulation, and the tax on notes above a certain amount was abolished. At the same time a Loan Office was created under the supervision of the Reichsbank, which could issue token money in the shape of notes against goods, securities, and the like. Hjalmar Schacht, *Stabilization of the Mark* (London, 1927), pp. 11-12.

bank notes had decreased in the same period from 51.8% to 10.2%.[2]

The years 1918-1923 were tragic ones for Germany. Revolution, the crushing terms of the Treaty of Versailles, and finally the London Agreement of 1921, its breakdown, and the consequent occupation of the Ruhr, made it impossible for the war-impoverished nation to meet the fantastic demands of its creditors. The tide of inflation set in. The Reichsbank was helpless to stem the flood of treasury bills presented to it for discount by a government forced to make increasing payments from rapidly dwindling resources.[3]

The height of the inflation was reached in October 1923. On October 15, 1923 the law creating the new Rentenbank was passed; on October 26, changes in the original Reichsbank law were made which gave to the Reichsbank practically dictatorial powers over German currency and credit, relieved it of all responsibility for government finance,[4] made it the sole arbiter of foreign exchange, and placed in its hands the task of rehabilitating the German monetary system. Of the success of the Reichsbank in this tremendous undertaking there can be no doubt. In time of crisis the central bank, free once more to operate as a central bank, proved itself capable of bringing order out of chaos. By January 1, 1924 stabilization had proceeded so far as to place all businesses in Germany on the new gold basis.[5]

2 *Ibid.*, p. 16. Here, and throughout the book, the American numerical notation is used.

3 The changes in the Reichsbank Law of 1914 had the effect of making the Reichsbank completely subservient to the fiscal policies of the Reich.

4 The introduction of the rentenmark as an intermediate currency was accomplished by granting 1.2 billion rentenmarks as a credit to the Reich and the same amount to agriculture and industry together. The remaining 800 million rentenmarks were used as capital and reserve of the Rentenbank. The Reich guaranteed to make no further demands upon the Reichsbank for credit and, on November 15, 1923, the Reichsbank ceased granting credits except in terms of the new rentenmark parity. For a complete explanation of the stabilization of the German currency, see H. Schacht, *op. cit.*

5 By January 1, 1924 all corporations were required to carry their ac-

The Dawes Conference began its deliberations in February 1924, and throughout the trying months of uncertainty the Reichsbank made long strides toward readjusting the German economy. As a result of the Dawes Plan, however, the Reichsbank was completely reorganized.

Complete reorganization of the Reichsbank was necessary not because it failed as a domestic central banking institution. The reorganization was an outgrowth of foreign distrust of Germany and of the unusual foreign interest in the stability of the currency because of the reparations question. The Bank Act of August 30, 1924 must be looked upon somewhat in the nature of an international agreement, and for at least the first six years of the period under discussion, the international character of the central bank of Germany cannot be neglected. The 1924 Statute was amended in 1926 and again in 1930. The 1926 amendments had to do primarily with broadening the powers of the Reichsbank in its purchase of government securities; the 1930 changes were the result of the Young Plan, through which Germany's financial institutions were freed from foreign control. The Bank Act was completely revised in 1933. These changes made of the Reichsbank an institution legally quite different from its 1924-1933 character and fall outside of the period under discussion here.

The Bank Act of August 30, 1924 as Amended in 1926 and 1930 [6]

The general purpose of the Reichsbank as stated in the 1924 charter was: 1) to regulate the circulation of money in the whole area of the Reich; 2) to facilitate the clearance of payments; and 3) to provide for the utilization of available capital. Except

counts in terms of gold at the rate of one trillion paper marks = one rentenmark = one gold mark. Actual publication of these gold balance sheets was not complete until the end of the year 1924.

6 Unless otherwise specified, all of the references to the Reichsbank in this section are taken from the German Bank Act of 1924 as published in the *Reichsgesetzblatt*, 1924. The amendments of 1926 and 1930 have been translated from the *Reichsgesetzblatt* of these years.

for the rights of the four remaining state banks of issue,[7] the Reichsbank was granted the monopoly of note issue for a period of fifty years and its notes were made full legal tender. The smallest denomination of the new Reichsbank notes was to be ten marks, unless an emergency was declared by the government, when notes of smaller denomination could be issued.

The old Reichsbank had been privately owned but operated by the government. The law of 1924 broke this old association of government control and created the new Bank as a privately owned stock company controlled by its own Board of Directors. Shares were to be issued in 100 reichsmark denominations in the name of specific individuals to a maximum amount of 400 million reichsmarks. Provision was made for a minimum capitalization of 300 million reichsmarks, but this was rescinded in 1930 since the share capital never reached this amount and experience had proved the minimum too large. The capital of the new Bank was actually obtained in these ways: the shares of the old Reichsbank were revalued at 50% of their former value [8]—a process which provided for 90 million reichsmarks of the new capital; the shares of the Gold Discount Bank [9] held by private commercial banks were taken over by the Reichsbank in exchange for Reichsbank shares which added 32,263,000 reichsmarks to its capitalization and brought the Gold Discount Bank wholly under Reichsbank control; a further amount of 525,000 reichsmarks in shares was allotted to the share holders of the Schleswig-Holstein Girobank against foreign currency which was surrendered to the Reichsbank. These operations brought the capitalization of the Reichsbank to 122,-

7 These were note banks of Bavaria, Württemberg, Saxony, and Baden. The combined total of bank notes for these four institutions was limited to 194 millions of reichsmarks. The 1924 Bank law provided that the Reich could withdraw the note privilege from these four banks at any time after January 1, 1935 on one year's notice. On December 18, 1933 a law was passed withdrawing the privilege effective December 21, 1935.

8 Other German securities comparable to the former Reichsbank shares were revalued after the inflation at 25% of their former value.

9 See below, pp. 62-69.

788,100 reichsmarks, at which figure it remained until May 1930, when the amount was raised to 150,000,000 reichsmarks through the sale of new shares.

Each share carries with it one vote, but no one person may have more than 300 votes. The shareholders meet annually to receive the report of the Board of Directors, to elect members to the Central Committee, and to confirm the selection of the members of the General Council. The Central Committee is composed of shareholders representing bankers, industrialists, and business men. Its function is primarily to advise the Board of Directors about loans and general business conditions. In 1926, a typical business year, it had twenty members of whom twelve represented banks and seven trade and industry; persons resident in Berlin predominated. The members of the Committees have the right to attend meetings of the Board of Directors. Its function can perhaps be compared to that of the Advisory Council of the Federal Reserve System.

The General Council was the connecting link between the Board of Directors of the Reichsbank and the foreign nations that claimed the right to watch over the stability of the German currency. The right of a foreign creditor to protect his own pecuniary interests by actual interference in the money and banking organization of the debtor country was recognized in the Bank law of August 1924 when the General Council was set up. The General Council was composed of fourteen members, seven Germans selected by the German stockholders and seven foreigners.[10] One of the German members was to be President of the Reichsbank and Chairman of the General Council; and one of the foreign members was to be the Note Commissioner, who was granted the veto right over any policy of the Reichsbank which might be considered dangerous to continued currency stability. The Council selected the members

10 The foreign countries represented were England, France, Italy, Belgium, United States, Holland and Switzerland. No member of the General Council, whether German or foreign, could be connected in any official capacity with the government of his country.

of the Board of Directors and also the President of the Reichsbank, thus again keeping a foreign supervisory eye on the administrative personnel of the bank. The President of the Reich had the right to veto two presidential selections of the Council, but the third choice of the Council became final. Although the Council seems to have functioned smoothly enough during the period of its existence, it was always resented by Germany as an unwarranted foreign interference in her internal affairs.

As a result of the Young Plan, the foreign control was abolished and the General Council was reorganized in 1930; it was then made up of ten German members to be selected by the Council itself, subject to ratification by the shareholders. Instead of meeting once a month as it had been required to do under the 1924 law, it was to meet at least four times a year to receive reports from the Board of Directors and to discuss matters of general policy. The Council retained its right to select the President of the Reichsbank and the members of the Board of Directors, but these selections were to be made from nominations presented to it by the Board of Directors. Also, the President of the Reich was given the deciding voice and all elections by the General Council were subject to his confirmation.

The actual government of the Reichsbank lies with the Board of Directors, in whose hands is placed control over the currency, credit and discount policies.[11] The members serve for twelve years with the exception of the President who serves for four years, and all must retire at the age of sixty-five. The number of members of the Board of Directors was not stated in the Statute, but ranged from twelve in 1924 to seven in 1933.

The 1924 law required that 20% of the net profit of the Bank must be set aside annually until the reserve fund equals 12% of the notes in circulation. The stock carries with it an 8% cumulative dividend (reduced to 6% in 1933) and the re-

11 This statement is strictly true only up to March 1933.

mainder of the profit was to be distributed as follows: of the first 50 million reichsmarks, 50% goes to the Reich [12] and 50% to the shareholders; of the second 50 million, 75% to the Reich and 25% to the shareholders; of the remainder, 90% to the Reich and 10% to the shareholders. On December 1, 1930, the law was changed to provide for a 10% payment out of profits to the reserve fund until that fund reaches the amount of the paid-in capital of the Bank (150 million reichsmarks); the remainder—after the 8% payment to shareholders—was to be distributed as follows: of the first 25 million reichsmarks, 75% to the Reich and 25% to the shareholders; of the next 20 million, 90% to the Reich and 10% to the shareholders; and of the remainder, 95% to the Reich and 5% to the shareholders. Table I shows the total net profit of the Reichsbank from 1924 to 1933 together with the distribution of profits.

It is important to note that until April 1930 the Reichsbank was not legally required to redeem its notes in gold nor to make gold payments of any sort.[13] Elaborate provisions, however, for the maintenance of gold reserves were set up. The Reichsbank was required to carry a 40% gold and foreign exchange coverage for all of its notes in circulation, but three-fourths of the coverage had to be in gold; the foreign exchange could be only bank notes of foreign countries, fourteen-day bills of exchange or checks, and demand deposits in the central money market of a foreign country. The remaining cover for the note issue was required to be three-month domestic or foreign bills of exchange of the type prescribed in the Bank Act. Furthermore, if the gold and foreign exchange cover fell below 40%, the foreign bills used for the additional note cover could be only four-

12 The Reich's share of the profits was to be used to redeem the Rentenbank notes. On March 7, 1934, a new law provided that the profits were to be used by the Reich simply as budget revenue. Further redemption of Rentenbank notes is now unprovided for.

13 Article 31 of the Law of 1924 made provision for such redemption but left it to the option of the Board of Directors and the General Council to determine the date of gold payments. Such action was not taken until the Young Plan was signed.

TABLE I. DISTRIBUTION OF REICHSBANK PROFITS
1924–1933
(In Millions of Reichsmarks) [a]

Year	Total net profit	Amount of total allotted to		
		Reserve	Shareholders	Government
1924	122.5	24.5	42.4	55.6
1925	42.7	8.5	22.0	12.2
1926	22.8	4.6	14.0	4.2
1927	26.0	5.2	15.3	5.5
1928	25.3	5.1	15.0	5.2
1929	25.5	5.5	15.1	5.3
1930 [b]	40.0	4.0	18.0	18.0
1931	13.3	1.3	12.0 [c]	—
1932	40.0	4.0	18.0	18.0
1933	40.1	4.0	18.0	18.1

[a] Compiled from *Annual Reports of the Reichsbank,* 1924-1933.

[b] In 1930, the law was changed requiring 10% of profits to go to the reserve fund and shifting the percentage of distribution to the shareholders and the government. Also in this year the capitalization of the Reichsbank was increased from 122,788,100 reichsmarks to 150,000,000 reichsmarks.

[c] Since 12 million reichsmarks were inadequate to pay the customary 12% dividend on shares, 6 millions were taken from the special reserve fund. The amount distributed to the shareholders was always between 10 and 12%—anything over this amount was held in a special reserve fund.

teen-day bills and the domestic bills could run only for thirty days. The responsibility for the note circulation and its coverage was placed in the hands of the Note Commissioner, who was a foreign member of the General Council from 1924 to 1930. In 1930 a German was appointed as Note Commissioner; he was directly responsible to the German government for the condition of the currency. The law provided that on the recommendation of the Board of Directors to the General Council, the gold coverage could be below 40% if unanimously agreed upon (less one vote) by the latter. In case such action was taken, there was to be a progressive tax of 3% per year if the cover sank to 37%, of 5% per year if it was between 35% and 37%, of 8% per year if it was between 33½% and 35%. The tax to be imposed below 33½% was to be 8% per year plus 1% for each 1% drop in coverage. Also, if a tax had to be imposed for failure to maintain the gold coverage at 40%, the bank rate could not fall below 5%. In 1932, the Reichsbank received permission from the Bank for International Settlements to lower its discount rate below the legal minimum of 5% in spite of its failure to maintain its legal gold coverage. In 1933, the tax requirements were rescinded. The following table shows the gold and foreign exchange position of the Reichsbank for the years 1924-1933. The year 1931, the year of the financial crisis, was the first time the note tax had to be paid.

TABLE II. GOLD AND FOREIGN EXCHANGE POSITION OF THE REICHSBANK AS A PERCENTAGE OF NOTES IN CIRCULATION [a]

1924–1933

Year end	% of gold to notes in circulation	% of gold and foreign exchange to notes in circulation	Tax paid (In millions of Rm.)
1924	39.1	52.2	—
1925	40.8	54.4	—
1926	49 0	62.9	—
1927	40.9	47.0	—
1928	55.4	58.5	—
1929	45.3	53.3	—
1930	46 4	56.2	—
1931 [b]	20.6	24.2	18.5
1932	22.6	25.8	— [c]
1933	10.6	10.9	— [d]

[a] Compiled from *Annual Reports of the Reichsbank*, 1924-1933.

[b] This is the lowest figure for the year. The yearly average for gold alone was 40.5% and for gold and foreign exchange, 45.3%.

[c] "According to an agreement with the Reich, the tax payable in 1932 was not collected. Later, 3.9 million reichsmarks of the tax paid in 1931 were repaid by the Reich to the Reichsbank." *Annual Report of the Reichsbank*, 1932.

[d] Tax requirement of the law was repealed.

The Reichsbank is empowered to carry on a general banking business comparable to the private commercial banks, although subjected to certain restrictions not applicable to the Joint Stock Banks. Specifically, it may:

1. Buy and sell gold and silver bullion, coin and foreign exchange.
2. Discount, buy and sell commercial bills of exchange of not more than three-months currency secured by three endorsers (one-third of the total discounts may carry two signatures only if other security is provided); it may also discount, buy and sell checks similarly endorsed.

In the 1924 law, there was no provision for dealing in treasury bills or government bonds, but in 1926 the law was amended to provide that the Bank may:

3. Discount, buy and sell treasury bills of the Reich of not more than three-months currency if such bills are endorsed by a person of well-known solvency who is not connected with the government. The amount of such discounts can never exceed 400 million reichsmarks. The amount must be published weekly by the Bank, and by the end of the government's fiscal year the debt to the Bank must be paid. There was no provision made for the direct purchase of long-term government bonds.

The law of 1924 provided further that the Bank may:

4. Carry on a lombard loan business. This is the business concerned with interest-bearing loans to customers against movable value objects—such loans by the Reichsbank to run for a maximum of three months. The law lists specifically the types of movable security that can be used as collateral for such loans together with the amount of security required as a collateral deposit. Lombard loans may be granted against:

a. Gold and silver.
b. Fully-paid shares of operating German railroads, debentures of Land Credit Banks under State supervision, bearer bonds of Public (Land) Credit institutions, and bonds of other Public Credit institutions issued against loans to a

German Communal Corporation. Such loans may be for an amount equal to three-fourths of the market value of the securities. In 1930, the word *Land*, in parenthesis above, was stricken out, which materially increased the lombardable securities with the Reichsbank, since by 1930 the position of the Public Credit institutions in the German economy had become of outstanding importance.

c. Bearer bonds of the Reich, States or Communes maturing in one year, or bearer bonds maturing in one year whose interest was guaranteed by the Reich, the States, or Communes. Such loans could be made only to banks of known solvency and in an amount equal to three-fourths of their market value. In 1930, this section remained as above, except for the insertion at the beginning, "On the security of interest-bearing bonds to bearer or bonds to bearer of the Reich . . ." This provision broadens the ability of the Reichsbank to grant lombard loans still further by admitting the long-term interest-bearing bonds of the Reich, States, or Communes to the lombard privilege. The 1924 law contained a separate provision which made it possible for the Bank to grant loans on long-term government bonds with the consent of the General Council but never in an amount to exceed its paid-up capital or surplus. This article was stricken out in 1930 in favor of the above wording.

d. Interest-bearing bonds of foreign states and debentures of foreign railroads whose interest is guaranteed by the State, providing that the amount of the loan is not more than 50% of the market value of the securities.

e. Bills of Exchange secured by known obligees up to 95% of their market value.

f. Merchandise stored in Germany up to two-thirds of its market value.

Further, the Bank may:

5. Buy and sell bonds of the type listed in 4 (c) above for its own account; it may buy stock-exchange investments of any kind for account of others after having in advance received cover in respect thereof, and may sell the same after previous delivery to the

Bank. This means, in effect, that the Reichsbank may act as a broker for its customers only in cash transactions of a non-speculative nature.

6. Receive deposits without interest.

7. Act as a paying and collecting agency for its customers (*Giroverkehr*). Forty percent of the Giro deposits of the bank must be kept in specific kinds of short-term investments, such as demand deposits with German or foreign banks, checks drawn on other banks, bills of exchange with a currency of thirty days, or demand lombard loans.

9. Act as the fiscal agent for the Reich. In this connection it may: hold government deposits without interest; grant three-months loans to the government up to 100 million reichsmarks which must be fully repaid by the government at the end of its fiscal year; float government bond issues (but the government may use other banks for this purpose if it desires); grant loans to the government-owned railroads and postoffices up to 200 million reichsmarks.

If one examines the Reichsbank in the light of its enabling act of 1924, there can be no doubt but that the Reichsbank was conceived of as a true central bank for Germany—a central bank set in the form of the orthodox banking theory of currency stability, of quantitative control over the credit mechanism "for the purpose of facilitating the flow of capital" through its discount facilities, and of providing a place of refuge in times of monetary stringency. Although its form and type of business is peculiarly German, it combines certain characteristics of the English and American banking systems. It does not adopt completely the "bankers' bank" principle of the American Federal Reserve System, nor is it as free as the Bank of England in the type of private banking business that it may conduct. In the first years after its reorganization, its credit control policies were hampered by its inability to engage freely in open market operations of the kind familiar to both American and English banking systems. One sees no obligation placed upon the Reichsbank to control the price level, to balance the rate of savings and the rate of investment, or to increase the standard of living of the German people. But we shall see that the fairly simple and limited objectives of the Reichsbank as stated in its charter were inadequate in the rapidly changing post-war world and that the Reichsbank, as other central banks, began to take on broader and broader control functions in the face of capital shortage, violent spending orgies based on funds borrowed abroad and—depression.

A bare outline of the charter provisions of the Reichsbank fails to give an adequate understanding of the business of the Bank, as it is normally carried on. A further analysis of the application of these provisions is essential.

THE BUSINESS OF THE REICHSBANK

The provision of the Reichsbank charter that permits it to establish branches throughout the Reich gives to the Bank its basic structural strength upon which rests its ability to enter freely into the economic life of the nation. The Reichsbank has the largest single network of branches of any bank doing business in Germany, and in the pre-war days, when the Great Banks were rapidly expanding, the Reichsbank and the Great Banks frequently competed with each other in the provinces and small cities. The Reichsbank, however, went much further in establishing branches in small towns than did the Great Banks. Table III shows the number of branches of the Reichsbank in the years 1924-1933.

The Reichsbank carries on business only with persons and firms accredited with it. In the German bank inquiry of 1926-1929, the Reichsbank presented to the committee a tabular analysis of its accredited customers divided into business classes.

If one studies the figures presented in Table IV one is struck by the large proportion of total customers in the first three groups—trade, industry, and agriculture (88.8% of the total). As might be expected from a knowledge of the increasing importance of large industry in the German economy, the industrialists formed the largest single group of customers of the Reichsbank in the years 1925 and 1928, although this position

TABLE III. REICHSBANK BRANCH BANKS[a]

1924–1933

Year	Totals	Main branches	Branches	Subsidiary branches: With cash department	Subsidiary branches: Without cash department	Goods depots
1924	448	17	80	349	1	1
1925	449	17	84	346	1	1
1926	453	17	84	350	1	1
1927	454	17	84	351	1	1
1928	456	17	84	353	1	1
1929	456	17	84	353	1	1
1930	456	17	84	353	1	1
1931	454	17	84	353	–	–
1932	454	17	84	353	–	–
1933	455	17	83	355	–	–

[a] Compiled from *Annual Reports of the Reichsbank*, 1924-1933.

was held by traders in the pre-war period. There is also a shift from the pre-war period in the percentages of agricultural customers of the Reichsbank, from 14.8% of the total in 1912 to 29.1% in 1926. This is explained, to some extent, by the efforts made by the Reichsbank to supply agricultural credit.

Agriculture was not in a position to tap the foreign markets for capital as were the larger businesses and industries of Germany in the immediate post-stabilization period. Long-term agricultural credit had always been obtained in Germany through mortgage bonds issued by the banks (largely the co-operatives) on the basis of pooled mortgages. This was a type of security unfamiliar to the foreign investor. The domestic capital market was slow to revive after the inflation, which deprived agriculture of long-term credit facilities. Short-term agricultural credit (up to one year) was also difficult to obtain, because the high rates in the Berlin money market for daily and monthly money made this type of investment more attractive to

TABLE IV. THE NUMBER OF FIRMS AND PERSONS ACCREDITED BY THE REICHSBANK ON NOV. 11, 1912, SEPT. 25, 1925, AND SEPT. 8, 1928[a]

Business classes	Number 1912	Number 1925	Number 1928	In percent of the total 1912	In percent of the total 1925	In percent of the total 1928
1. Business men and trade corporations	22,137	11,801	10,423	35 9	25.4	25.1
2. Industrialists and industrial corporations	19,671	16,663	14,983	31.9	35.5	36.1
3. Agriculturalists and agricultural trade and manufacturing businesses	9,121	13,693	11,463	14.8	29.1	27 6
4. Banks and bankers	2,201	1,975	1,891	3 6	4.2	4.6
5. Public savings banks	——	384	725	—	2.0	1.7
6. Coöperative societies of all sorts	1,014	983	1,205	1.6	0.8	2.9
7. Other persons of private means, artisans, professionals, small independent business men, etc.	7,539	1,438	811	12.2	3.0	2.0
Total	61,683	46,937	41,501	100.0	100.0	100.0

[a] Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen der Deutschen Wirtschaft, *Die Reichsbank* (Berlin, 1929), p. 54.

the banks than the longer and slower agricultural loan. The coöperative banks—the main support of agriculture in Germany—because of capital losses in the inflation, were in no position to assume their old role in the domestic economy. In this emergency, the Reichsbank endeavored in many ways to provide special credit facilities for agriculture.[14]

14 See below, pp. 56-66.

The small percentage of banks and bankers accredited with the Reichsbank reflects the high degree of concentration in the German banking system. Practically all banks of any importance carry Giro deposits with the Reichsbank and enter into business transactions with it. As we shall see below, this group, while small in number, received on August 7, 1928, 41.1% of the total lombard credits granted by the Reichsbank and 48% of the total domestic bill credits.

It is interesting to note the post-war affiliation of the public savings banks with the Reichsbank. Prior to the war, these banks were purely savings institutions keeping their funds very largely in long-term investments and having little or no relationship to the commercial banking system. Their entrance into the short-term money market and into the deposit and lending business is shown by their post-war relationships with the Reichsbank. Although the number of savings banks accredited with the Reichsbank was only 2% of its total customers in 1925 and 1.1% in 1928, this again is only the reflection of the degree of concentration in the banking system. The savings banks are connected with the Reichsbank indirectly through several large banking institutions which serve the savings banks as clearing and collection centers.[15]

The Reichsbank also gave its support to the coöperative associations, and in the ten years under discussion made an effort to bring the business of the coöperatives into line with the rest of the banking system. The credit coöperatives in Germany have always been connected with the Reichsbank to some extent, but after 1924 they showed a tendency to increase their short-term deposit and lending business, thus making them more dependent upon the rediscount facilities of the central bank. The decrease in percentage in 1925 as compared with 1912 (.8% as against 1.6%) indicates only that the coöperative banks had lost heavily during the inflation and, since their connection is with the small farmer and business man, their capital

15 See below, Chapter III, pp. 90 to 98.

was slow to accumulate in the immediate post-stabilization years. By 1928 they had regained their former strength and were becoming a factor of increasing importance in the short-term money markets.

The large decrease in the number of private persons accredited as customers with the Reichsbank (Group 7) in the years 1925 and 1928 probably reflects, on the one hand, the effects of the inflation in wiping out large fortunes and, on the other hand, the decrease in the numbers of small independent business men.

The business of the Reichsbank can be divided into two main groups: 1) its Giro and cash business and 2) its bill and lombard business. These two groups are interlocked, for its Giro deposits form the basis of the liquid investments of the Bank and, together with the capital of the Reichsbank, provide the funds necessary to purchase specific securities for the note covering. The creation of bank notes is tied up with its bill business as well as its lombard business and to some extent its current accounts,[16] although this latter is not an important kind of business for the Reichsbank.

THE GIRO AND CASH BUSINESS OF THE REICHSBANK

The Giro business of the Reichsbank was established in 1876 shortly after the Reichsbank came into existence, and was patterned after the clearing system developed by the Hamburg banks when that city was the financial center of the trading cities of Germany. The Giro system is essentially a method of transferring funds from one place to another or from one person to another through orders drawn upon demand deposits in the Reichsbank. The method is comparatively simple, and differs from the typical checking account of the American banks in that the entire transaction is confined to transference of funds from one client to another on the books of the Reichsbank. The payer orders the Reichsbank to transfer a certain amount from his account to that of the payee. The order drawn

16 See below, p. 81, footnote.

is not a negotiable instrument; the payee is notified by mail (at the expense of the Reichsbank) of the addition to his account.[17] There is nothing comparable to this in American banking, although the Giro transference of funds might be said to lie halfway between the money-order business of the American postoffice and the use of checks. It is simple and effective and is made possible through the branch banking system of the Reichsbank.

The use of checks, as customary in American and English banking, was slow to develop in Germany and, until the passage of the Check Law of 1908, checks drawn directly against banking accounts were practically unknown. Bank deposits in German banks were (and are still, to a very large extent) time deposits requiring seven to thirty days notice for withdrawal. The interbank clearance of checks has increased in the post-war period, but it is still far below the Reichsbank Giro figures (see Table V). Transfer of funds in small amounts through the postoffices was established by the German government in 1912, and while these figures also show an increase in the post-war period they represent simply an additional fluidity in the means of making payments of small amounts and are supplementary to the Reichsbank clearing. The postoffice transfer of funds is also a Giro system.

Banks undertake to make payment for their customers through their own Giro deposits with the Reichsbank. Traders and industrial firms keep Giro accounts with the Reichsbank as well as officials of the government and private persons. The Reichsbank with its branches reaching into all centers of the Reich is well equipped to handle the transfer and clearance

17 Until 1928, the cost of postage was borne by the payer; in this year, however, the Reichsbank developed the use of a carbon copy for bank transfers in which the order to pay and the notification to the payee was accomplished in one operation. This so reduced the overhead cost of clerical assistance that the Reichsbank took over the postage charges. In case of local transfers the payee usually calls at the Bank for his carbon notifications of additions to his account, which materially reduces the postage costs of the Reichsbank. Reichsbank *Annual Report*, 1928, p. 8.

business for the entire country. The method has the advantage of concentrating large amounts of liquid funds in the central bank. The Reichsbank had 44,775 Giro customers in 1926 and 42,255 in 1932. The decrease reflects the higher degree of concentration in the banking and industrial life of the nation as well as the effect of the depression on the Reichsbank Giro accounts. For these accounts, the Reichsbank requires a permanent minimum deposit from each customer, ranging from 100 reichsmarks for the smaller and inactive accounts to more than 1,000,000 reichsmarks for the Berlin Great Banks. It pays no interest on the deposits, but does not charge for the service rendered. The banks have, on the whole, tended to keep larger balances in their Reichsbank Giro accounts in the post-war period because of the high degree of liquidity of the Giro balance. Banks build up deposits through 1) cash deposits, 2) transfers from Giro customers, 3) the discounting of bills, and 4) lombard loans. On the other hand, industrialists have tended to decrease their Reichsbank deposits in favor of direct investment in the money market of their own surplus funds. The Reichsbank has extended its Giro facilities to persons with no Giro account who wish to make payments to persons holding accounts, at a cost of 1/10% of the amount transferred; payments will also be made, when neither payer nor payee holds Giro accounts, at a maximum cost of 1% of the amount transferred. Transfers of the first type amounted to 2,144 million reichsmarks in 1928 and of the second type to 183 million. The cost in the latter instance is comparatively high, and this type of business is handled more cheaply by the postoffice Giro system.

At the end of 1926, the Reichsbank opened a telegraph Giro clearing system and in 1927, it established an international Giro transfer system with the central banks of other countries. Its telegraph Giro transfers increased from approximately eleven billion reichsmarks in 1928 to a high point of fourteen billion in 1931, dropping again to eleven billion in 1932; its international transfers increased steadily from seventy-eight million reichsmarks in 1928 to a high point of 615 million in 1932. The extent of the Giro business of the Reichsbank as compared with the check clearance in the inter-bank clearing houses and the post-check clearing houses is shown in the following table, together with the total Giro credit balances of the Reichsbank and the percentage of the Giro business effected without the use of cash.

TABLE V. DEVELOPMENT OF THE CLEARING BUSINESS
1924–1933 [a]
(In millions of Rm.)

Year	Annual turnover Giro business of the Reichsbank	Annual turnover		Giro credit balances with the Reichsbank on Jan. 31	% of total Giro business effected without the use of cash
		Clearing houses	Post check transfers		
1913 ...	379,157.1	73,634 2	41,571.5	—	—
1924 ...	433,498.7	31,462.9	78,502.9	—	—
1925 ...	472,378.8	50,926.3	110,834 8	632.0	88.8
1926 ...	539,423.8	56,876 9	114,809 7	575 8	89.3
1927 ...	628,793 1	97,744.2	136,052 0	484.2	92.1
1928 ...	694,726.3	121,004.1	145,811 4	615.5	92.1
1929 ...	750,655.0	126,200.0	150,692 7	663.3	92.3
1930 ...	704,587.3	119,341.7	141,449.7	621.6	92.2
1931 ...	622,140.4	85,842.6	123,189.3	540.4	92.2
1932 ...	526,385.9	55,300.0	103,421.7	663.3	93.1
1933 ...	503,579.3	52,200 0	101,350 1	462.3	93.5

[a] Figures through 1928 compiled by the Reichsbank and presented to the bank inquiring committee of 1929. *Die Reichsbank, op. cit.*, p. 16. Figures from 1929 through 1933 compiled from *Annual Reports of the Reichsbank* and the *Statistisches Jahrbuch für das Deutsche Reich*, 1933 and 1937.

The figures bring out the preponderant importance of the Reichsbank clearing system over the clearing houses and the post-check transfer system. They also show the comparatively small cash drain on the Reichsbank in spite of the fact that the turnover reaches as much as 100% on some days. The permanent balances ranged from a low point of 462.3 million reichsmarks in 1933 to a high point of 663.3 million in 1929 and in 1932. These permanent balances form the basis of the Reichsbank's investments in the short-term money market. As was pointed out above, there is a 40% coverage requirement for the Giro balances, the investments to be in specific securities such as demand deposits with German or foreign banks, checks drawn on other banks, bills of exchange with a currency of not more than thirty days, or demand lombard loans. As a matter of fact, the Reichsbank keeps a much higher covering for its Giro deposits. The actual amount of cover kept by the Reichsbank is shown in the following table.

TABLE VI. COVER FOR REICHSBANK DEPOSITS AS A PERCENTAGE OF TOTAL DEPOSITS, 1924–1933 [a]

Dec. 31	Cover percentage	Total deposits (In millions Rm.)
1924	191.7	820.9
1925	82.8	697.0
1926	90.2	648.0
1927	105.6	779.1
1928	102 5	816 0
1929	98.1	755.2
1930	103.3	651.8
1931	109.7	754.9
1932	66.4	539.9
1933	70 2	639.8

[a] Compiled from Reichsbank *Annual Reports,* 1924 to 1933. The total Giro deposits on December 31 are usually larger than at any other time during the year because of the large money demands on the banks arising from year-end settlements. Compare these figures with those in Table V, column 4.

Dr. Schacht, reporting to the investigating committee in 1929, expressed the opinion that the legal coverage provisions of the law of 1924 were faulty because the Reichsbank has no control over the size and amount of turnover of its Giro business and must stand ready at all times to pay out cash on demand. Furthermore, he pointed out that since Giro credits are built up first of all through bill discounting, there is danger of an increase in the note circulation as the Giro balances increase. Because of this, the Reichsbank had always held (this was up to 1928) a certain margin of gold and foreign exchange over its legal requirements for note coverage.[18] As a matter of actual practice, the Giro business of the Reichsbank is linked closely to all of its other business. What is meant here by the statement of Dr. Schacht as to the practice of the Reichsbank in holding excess reserves of gold and foreign exchange is simply that the Bank is forced to maintain a higher degree of liquidity because of its Giro deposits. The usual note cover percentage of gold and foreign exchange to notes in circulation does not give a true picture of the liquidity of the Bank. The actual position of the Reichsbank is shown by the relationship of notes plus Giro deposits on the one hand to gold and foreign exchange and bills on the other.[19] The Reichsbank must be sure, however, that it has at all times a sufficient amount of short-term bills to meet the legal coverage requirement for Giro deposits. These bill requirements differ somewhat from those for notes in circulation.

All Reichsbank deposits are Giro deposits. Customers maintain a balance with the central bank only large enough to meet their needs for the cash-less transfer of funds. Since the Reichsbank pays no interest on these deposits, there is no tendency to hold excess balances with the central bank. Business habits and customs (such as the month-end, quarter-day and year-end settlement), and the state of the business cycle are the determining factors in the size of the balances. Giro deposits with the Reichsbank are looked upon by the commercial banks as a secondary cash reserve, but since these deposits are constantly used they fluctuate widely from day to day and are never very large for any one bank. The extent to which the Giro deposits with the Reichsbank are used by depositors is shown by a com-

18 *Die Reichsbank, op. cit.*, pp. 130-131.

19 See Chart VII, p. 328.

parison of the annual turnover figures with those of permanent balances (Table V, Columns I and IV). On a year's basis, the velocity of turnover is about 90%, but during the course of any one day the velocity may reach as much as 100% or 110%.[20]

THE DISCOUNT BUSINESS OF THE REICHSBANK

The Reichsbank, as the central note bank, is the only bank of importance that can put into circulation notes backed by bills. As a bank carrying on a regular banking business, its investments in bills compete with those of other banks in the money market. In its capacity as note bank, it stands as the court of last resort in times of monetary stringency, and the other banks depend upon the Reichsbank for the rediscount privilege. Its rediscounts increase on month-end settlement days, on quarter-days and at the end of the year, when the banks must meet large cash demands. At other times the banks prefer to rediscount among themselves or to use their bills as the basis of lombard loans.

Table VII analyzes the total bill credits of the Reichsbank on August 7, 1928, a day probably typical of the normal business of the Reichsbank—normal in the sense that the day chosen is not a settlement day, middle of the month, month-end, or quarter-day. Although bills discounted for bankers formed only 5.7% of the total number of bills discounted by the Reichsbank, the value of the bankers' bill was 48.5% of the total. Furthermore, almost half of the total number of bills discounted (47.08%) fell in the group of 100,000 reichsmarks to 500,000 reichsmarks and over, and this group absorbed 94.68% of the total amount of discount credit going to bankers. The conclusion can be drawn that a large proportion of Reichsbank bill credit goes to banks and bankers through the rediscount of a comparatively small number of bills of large amounts.

Traders and trade corporations received 12.9% of the total

20 *Die Reichsbank, op. cit.*, pp. 20-27, pp. 130-131. Also, *Annual Reports of the Reichsbank*, 1924-1933.

TABLE VII. DOMESTIC BILL CREDITS OF THE REICHSBANK ON AUGUST 7, 1928[a]
(Arranged by business groups with number of bills in each class and the amount of credit)

Business groups		% of total	Number and amount (Amt. in 1,000 Rm.)	In % of the number or of the amount: Under 10,000 to Rm. 30,000	Over 30,000 to Rm. 100,000	Over Rm. 100,00 to Rm. 500,000 and over
Bank and bankers (with the exception of savings banks and cooperatives)	Number	5.7	1,606	24 83	28.09	47.08
	Amount	48.5	926,196	1.41	3.91	94.68
Traders and trade corporations (with the exception of coöperatives)	Number	25.1	7,120	65.13	27.00	7.87
	Amount	12.9	245,404	21.97	26.75	51.28
Industrialists and industrial corporations (with the exception of coöperatives)	Number	36 8	10,400	41 04	34 11	24.85
	Amount	29.9	571,531	8.27	17.28	74.45
Agriculturalists and agricultural trade and manufacturing businesses	Number	25.8	7,316	82.28	15.05	2.67
	Amount	4.8	90,386	48.70	29.99	21.31
Public savings banks	Number	1.5	415	77.83	18.31	3.86
	Amount	0.8	16,036	57.42	22.87	19.71
Coöperative associations of all kinds	Number	3.4	953	58 77	31.48	9.75
	Amount	2.8	53,208	17.30	33.19	49.51
Others (persons of private means, artisans, professionals, small independent business men, etc.)	Number	1.7	482	86.51	11.83	1.66
	Amount	0.3	4,731	56.39	26.15	17.46
Total	Number	100	28,292	58.7	26.4	14.9
	Amount	100	1,907,492[b]	9.4	13.2	77.4

[a] On the basis of information published in *Die Reichsbank, op. cit.*, p. 47.

[b] "The total domestic bill position of the Reichsbank on August 7 was 2,022,619,000 reichsmarks. The difference of 115,127,000 reichsmarks (5.7%) represents the amount of bills due but unpaid on August 6 and 7; a part of these overdue bills was taken over by the Reichsbank from the Gold Discount Bank and from public departments." *Ibid.*

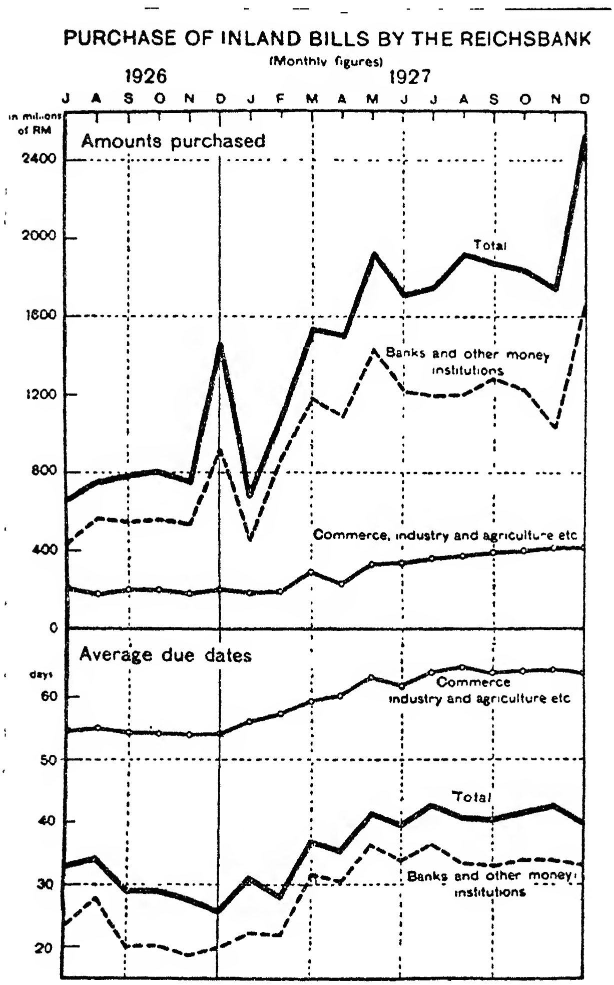
value of bill credit with again the larger share going to the bills of larger denominations (51.28%). The number of bills discounted for this business group was 25.1% of the total. The relations of the Reichsbank with trade seem to consist in the discounting of a large number of small bills (10,000 to 30,000 reichsmarks), and of a small number of large bills.

Industry and industrial corporations accounted for the largest single quantity of bills discounted, 36.8% of the total number. The value of industrial bills formed, however, only 29.9% of the total amount of bill credit and this was represented largely by bills of large denomination. Trade and industry together received 42.8% of the total amount of domestic bill credit.

Bills discounted for agriculture accounted for 25.8% of the total number of bills discounted by the Reichsbank and these were made up of a large number of small bills. The percentage of the total value of bill credit going to this class was, however, very small—only 4.8%. The other three business groups—savings banks, coöperatives, and private individuals—are negligible to the bill business of the Reichsbank, both from the standpoint of numbers of bills discounted and their value. An examination of the total figures of Reichsbank credits on August 7, 1928 leads one to the conclusion that the total amount of its bill credits is highly concentrated in bills of 100,000 reichsmarks and over (77.4%); in numbers of bills discounted there is a concentration in the bills of 30,000 reichsmarks and less.

While the information in Table VII is highly significant, it gives no clear picture of the day by day relationship of the Reichsbank with the banks and with agriculture, trade, and industry. This is a question that is important from the standpoint of the Reichsbank as a central bank, for it throws light upon the extent to which the Reichsbank plays the part of a bankers' bank in the German economy, and that to which it engages in a private banking business. Although the Reichsbank, unfortunately, publishes no figures as to its domestic bill purchases, it does, from time to time, publish in its annual reports charts showing this information as well as the average due dates of the bills purchased. Four of these (Charts I-A

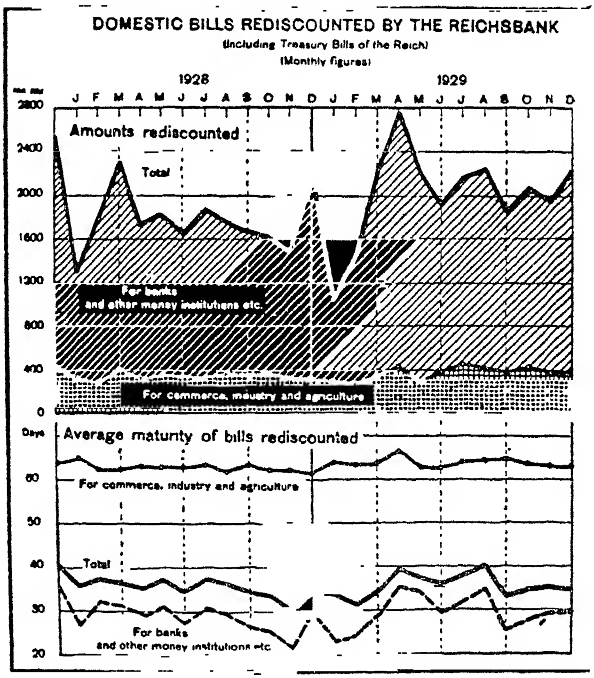
CHART I—A



to D) have been reproduced here from the annual reports of the Reichsbank.

One fact of interest that is brought out from an examination of these charts is that, while the total domestic bill credits of the Reichsbank fluctuated from a low point of about 700 million reichsmarks in 1926 to a high point of 4.2 billions in September 1931, the amount of bills discounted directly from business, industry and agriculture remained remarkably stable at between 200 million to 400 million reichsmarks. The direct connections

CHART I—B



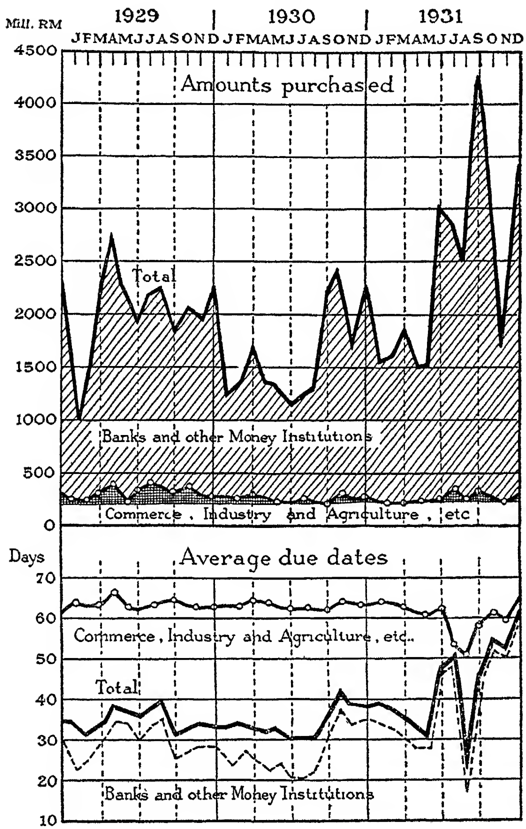
of the Reichsbank with trade, industry, and agriculture form not only a small proportion of the total bill business of the Bank, but this business seems to remain uninfluenced by the factors that play upon the bank discounts and make them subject to violent fluctuations.

The total amount of bills discounted for banks and other money institutions, shows very little regularity of movement

CHART I—C

PURCHASE OF INLAND BILLS BY THE REICHSBANK

(Monthly figures)

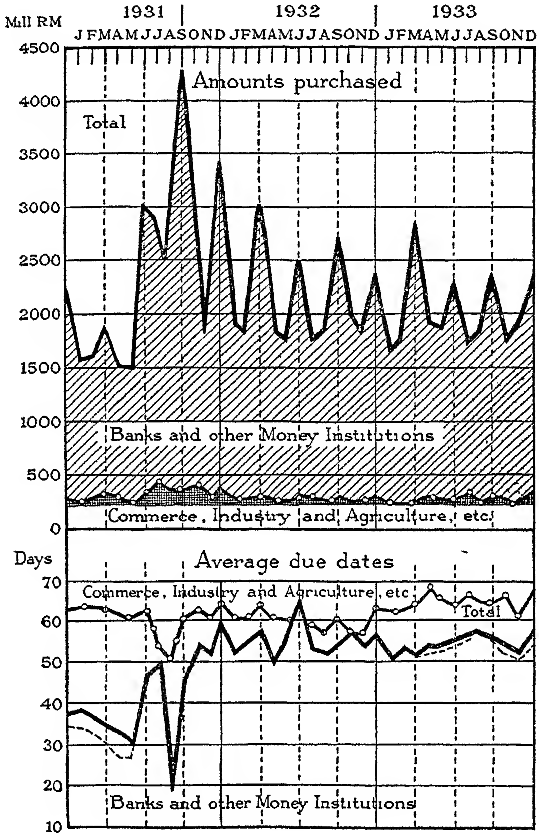


and wide fluctuations in total volume in the period from 1927 to 1932. After 1932, the average amount of bill credits of the Reichsbank remained stable at about 1.8 billion reichsmarks, with increases on quarter-day and year-end settlement day. The organization of the commercial banking system and of the money market in Germany tends to make the banks dependent upon the Reichsbank at these times when they are forced to

CHART I—D

PURCHASE OF INLAND BILLS BY THE REICHSBANK

(Monthly figures)



have large amounts of cash on hand to meet settlement requirements. Although there is a tendency for bill discounts to increase at the end of the years 1926, 1927, and 1928, and perhaps a slight increase in December 1929, 1930, and 1931, these increases do not show the sharp dependence on Reichsbank credit that is noticeable in the years 1932 and 1933. There is almost no reflection of an increased dependence of the banks on Reichsbank support on quarter-days. It seems evident that the direct discount business of the Reichsbank forms a very small portion of its total bill business; and that the Reichsbank is much more of a central bank performing the function of a lender of last resort to the banks in the German economy than it is a private bank carrying on a private banking business.

The length of life of the bills discounted for trade, industry, and agriculture was much greater than that of the bills discounted for banks and other money institutions and also showed a greater stability. The average range for the former seems to have been between fifty-five and seventy days, while that for the latter (with the exception of the years 1932 and 1933) was between twenty and forty days. The quality of the bills discounted by the Reichsbank for banks has a direct bearing upon the control policies of the Bank and is related to the whole question of the dependence of the banks on the central bank in particular periods. In so far as trade, industry, and agriculture are concerned, the Reichsbank bill business seems to be stable in amount and in duration; in so far as its discount business is related to the banks, it seems to be fluctuating in amount and in duration. By far the greater part of its bill business is with banks and other money institutions. These facts must be borne in mind in discussing the discount policy of the Reichsbank.[21]

The Reichsbank is limited by its charter to the discount of three-month bills bearing three signatures, with the exception of one-third of the bills which may bear only two. As a matter of practice, the Reichsbank tries to keep a larger proportion of its portfolio in bills bearing three endorsements than it is legally required to do. The third endorsement is almost always that of a bank which, in theory at least, relieves the note bank of too close an association with the risks of trade and industry. It is questionable, however, whether in Germany, the third endorsement serves the purpose of relieving the Reichsbank of

21 See Chapter VIII.

risk. The close association of the credit banks with industry so links them with the success of business that the banks themselves are apt to stand or fall with their industrial undertakings. Also, the growth of public banks in Germany means that the bank guarantee may be that of a public credit institution so intimately connected with the Reichsbank that for all practical purposes its guarantee is an empty formality. This seems to have been particularly true in the years 1930 to 1933.

Self-liquidating trade bills are the basis of Reichsbank discounts. It does not purchase interbank finance bills, but stands ready to purchase all bank acceptances that have been created through legitimate trade transactions, especially those used for financing the export trade.[22] The Reichsbank was not permitted to rediscount treasury bills of the Reich until 1926, when the amount of such discounts was limited to 400 million reichsmarks. The Reich, however, did not issue treasury bills until the year 1928; the amount held by the Reichsbank in that year was comparatively small but increased from 1929 to 1933. The majority of bills in the portfolio of the Reichsbank remain trade bills.

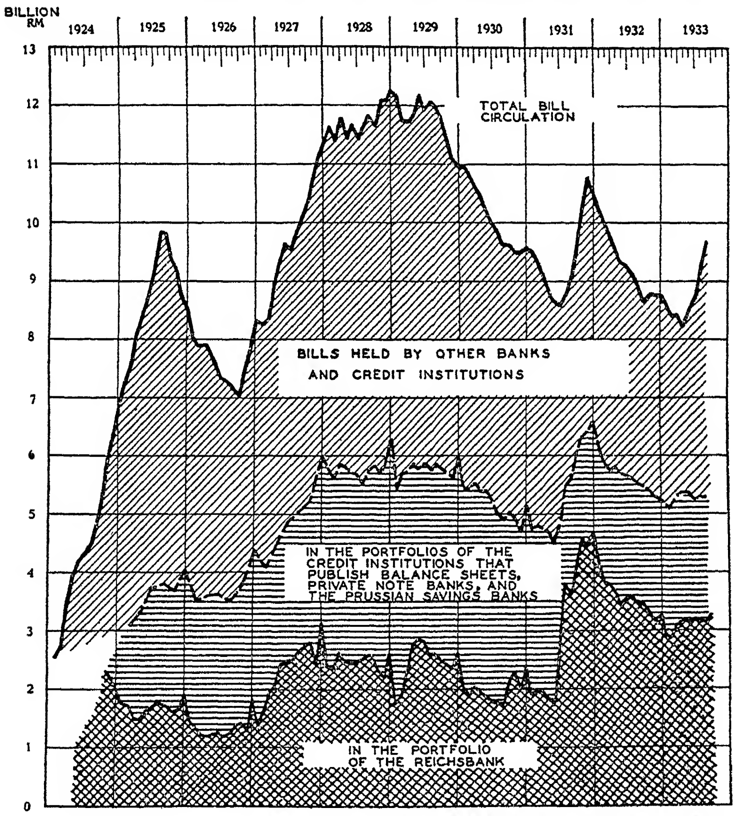
The Reichsbank is the largest single rediscounter of bills in the German market. The total amount of bills held by the Bank in relationship to the total amount of bills in circulation is, at any one time, comparatively small. The general relationship of the bills in the portfolio of the Reichsbank to the total amount of bills is shown in Chart II.[23] Of the total amount of bills, a large portion (roughly one-half) is held by the banks until maturity. The banks may rediscount their bills among themselves or with the Reichsbank. The Berlin banks, the private note banks, and the Prussian Savings Bank (*Preussenkasse*)

22 It should be borne in mind, however, that the distinction between a finance bill and a bank acceptance is sometimes difficult to make. See *Die Reichsbank, op. cit.*, pp. 137-141.

23 Reproduced from an article by Reichsbank Director Emil Puhl, "*Wiederaufbau des Geld- und Kapitalmarktes*," *Untersuchung des Bankwesens*, Part I, Vol. II (Berlin, 1933), p. 233. This chart was plotted from private information in the files of the Reichsbank.

hold a portion of these rediscounts and the Reichsbank the remainder. It is impossible to determine from the chart the exact relationships. Only a small portion of the bills in the portfolio of the Reichsbank are direct discounts from trade and industry, as we have seen above; probably a larger portion of

CHART 11. TOTAL BILLS IN CIRCULATION, BILL POSITION OF THE BANKS AND OF THE REICHSBANK, 1924–33



the bills held in the middle group (the Berlin banks, the private note banks, and the Prussian Savings Bank) represents direct discounts. The Reichsbank probably held on the average, from 1924 to the middle of 1931, about two-thirds of the total amount of bills rediscounted. After 1931, the Reichsbank was forced to take over a very much larger portion of the total bill business.

The Reichsbank rediscounts all bills at its fixed discount rate, making no difference in the cost because of differences in the qualities of particular bills. On the other hand, in its open market purchases of discounts, it may use the Reichsbank rate or may purchase at a private rate which is less than its fixed rate and is usually less than the prevailing open market private discount rate. The use of a private rate by the Reichsbank developed out of the fact that the Reichsbank, in the pre-war period, found itself unable to purchase good trade bills in the open market in competition with the credit banks since, because of bank competition, the Reichsbank's official discount rate tended to set the upper limit of the cost of discount credit. Frequently, the Reichsbank found itself completely out of touch with the money market and unable to control it through the usual means of raising or lowering the official bank rate. There were two ways of controlling this situation in the pre-war period. On the one hand, it was possible to use the Reichsbank's open market purchase and sale of treasury bills to influence the open money market rate; or, on the other hand, if the situation demanded, it could purchase bills directly at its private discount rate. Both types of control were used. After 1924, however, the situation was radically changed. The 1924 charter (Art. 23) permits the Reichsbank to discount bills at a private rate lower than its official rate, but deprives the Bank of the right to engage in the open market purchase and sale of treasury bills.

This inability of the Reichsbank to engage in open market operations as a supplement to its discount policy deprived the Reichsbank of one of the main tools of central bank control. Furthermore, as we have seen above, the ability of the Bank to use its private rate as a control device is limited by the legal requirement which forces the bills purchased by the Reichsbank to carry three endorsements. The Reichsbank cannot purchase an amount of bills in the open market large enough to influence the money market rate. Although the Reichsbank used its private discount rate to purchase bills in the open market in the ten years under discussion, especially when the market rates of interest were low compared to the Reichsbank rate, the operation cannot be considered as a control device comparable to its pre-war power. These two handicaps to the Reichsbank discount policy, the lack of open market operations and the inability to use a private discount rate in bill purchases should be borne in mind in any discussion of the Reichsbank as a central bank. Because of these handicaps, the Reichsbank was forced to find other methods of control.

THE LOMBARD BUSINESS OF THE REICHSBANK

The Reichsbank is limited by its charter in the type of securities it can accept as the backing of lombard loans, which materially restricts this type of business for the Bank and gives it a much smaller place in its total balance sheet than that held by the same item in the balance sheets of other banks. An examination of the information provided by the Reichsbank to the banking investigating committee (Table VIII) reveals the same concentration of its lombard business that was found in its bill credits. Of the total amount of lombard credit, 41.4% went to banks and bankers, the amounts being fairly evenly divided among the three credit groups. From the standpoint of number of lombard loans granted to this class of borrowers, the largest number of borrowers was found in the group of loans of less than 30,000 reichsmarks (93.20%). If one adds to these figures those of the savings banks and the coöperatives, the amount of lombard credit going to banks of all kinds was 71.7% of the total amount granted and 79.6% of the number of loans granted. In these three groups together, there is a high degree of concentration in the number of loans granted in the smallest credit group (under 30,000 reichsmarks) although, again from the standpoint of amount of credit granted, there is an emphasis upon the largest credit group (100,000 reichsmarks and over). One can conclude from these

TABLE VIII. LOMBARD POSITION OF THE REICHSBANK ON AUGUST 7, 1928 [a]
Arranged by business classes—number and amount of credit in each class—together with credits in three large groups

Business groups		Number and amount (Amt. in 1,000 Rm.)	In % of the number or of the amounts: Under 10,000 to Rm. 30,000	Over 30,000 to Rm. 100,000	Over 100,000 to Rm. 500,000 and over
Banks and bankers (with the exception of savings banks and cooperatives)	Number	1,589	93.20	5 54	1.26
	Amount	12,405	27.61	36.27	36.12
Traders and trade corporations (with the exception of coöperatives)	Number	200	90.00	8.50	1 50
	Amount	3,040	30.88	29.51	39.61
Industrialists and industrial corporations (with the exception of coöperatives)	Number	109	81.65	11.93	6.42
	Amount	2,566	32.74	29.04	38.22
Agriculturalists and agricultural trade and manufacturing businesses	Number	48	87.50	8.34	4.16
	Amount	785	32.74	29.04	38.22
Public savings banks	Number	385	88.32	7.27	3.91
	Amount	5,784	17.30	27.95	54.75
Coöperative associations of all kinds	Number	213	92.96	5.63	1.41
	Amount	3,105	26 06	16.22	57.72
Private persons	Number	177	97.74	2.26	——
	Amount	871	71.41	28.59	——
Others (persons of private means, artisans, professionals, etc.)	Number	26	92.30	3.85	3.85
	Amount	1,124	13.08	3.29	83.63
Total	Number	2,747	92.1	6.1	1.8
	Amount	29,680	26.2	29.4	44.4

[a] *Die Reichsbank, op. cit.*, p. 58.

figures that the lombard loan business of the Reichsbank is almost wholly with small banks and that it consists of a large number of separate transactions of small amounts. It is supplemented, however, by a few large loans to large banks. The reason for this lies in the fact that the Reichsbank lombard loan rate is higher than the open market lombard rate and the Berlin Great Banks usually prefer to lombard their securities with the Seehandlung or other lending banks in the money market. They usually lombard with the Reichsbank when in need of building up their Giro deposits in preparation for month-end or quarter-end settlement day. The figures analyzed represent the lombard loan position of the Reichsbank on a normal day in a fairly prosperous business year, and therefore reflect the lombard loans of the Reichsbank as a bank carrying on a regular banking business rather than as a central bank functioning as a money center for the entire banking system. It would be interesting for purposes of comparison to have the same set of figures for a month-end or quarter-day; as far as is known, such figures have not been published by the Reichsbank.

The total lombard loans and the amounts loaned against specific collateral, as reported on the annual balance sheets, are shown in Table IX.

The figures for the total amount of lombard loans granted by the Reichsbank bring out the relative unimportance of this type of business. The largest amount shown by the year-end balance sheets is 256 million reichsmarks on Dec. 31, 1930. The total amount of bill credits on the same date amounted to 2,365.6 million reichsmarks. The Reichsbank restricted its lombard loans until the end of the year 1927, not only by keeping its lombard rate 2% above the bank rate, but by refusing to admit certain securities to the lombard privilege, although they were legally eligible. This caution was considered a necessary part of strengthening the central note bank because its note circulation may be increased through its lombard business as well as through its bill business; but, while bill discounting brings to the Bank cover for the notes in circulation, the

TABLE IX. LOMBARD LOANS OF THE REICHSBANK, 1924–1933
Arranged according to the security backing the loan [a]
(In millions of reichsmarks)

Year end	Total	Gold and silver	Securities	Bills	Commodities	Long-term obligations of the Reich.	Treas. bills of the Reich.
1924	16.96	.010	1.20	13.34	2.41	——	——
1925	10.29	——	1.45	8.45	0.39	——	——
1926	84.08	.001	41.49	41.14	1.14	0.31	——
1927	78.32	——	36.26	34.82	2.82	4.43	——
1928	176.07	——	30.36	91.17	2.90	18.91	32 73
1929	250.63	001	166.67	32.88	1.17	27.43	22.48
1930	256.01	——	233.26	16.23	6.52	——	——
1931	244.63	——	172.45	60.10	3.49	——	8.60
1932	170.06	——	153.50	2.17	16.27	——	4.13
1933	183 28	.054	150.87	3.16	6.31	——	22 89

[a] Compiled from *Annual Reports of the Reichsbank,* 1924-1933.

lombard business does not. Therefore, the Reichsbank might easily have found itself in the position of decreasing its gold and foreign exchange percentage through its lombard business as well as decreasing the relative amount of eligible bills for note cover unless it had taken pains to discourage this type of business.

The business of the Reichsbank is thus confined almost wholly to its Giro and cash business and to its bill business. In the former business, the Bank supplies the entire country with adequate means of payment; in the latter, it serves banks and business as the lender of last resort.

THE GOLD DISCOUNT BANK

No complete understanding of the Reichsbank, its powers, its limitations, and its control policies is possible in the post-war period without an understanding of the Gold Discount Bank—the "daughter" institution of the Reichsbank. This bank, since 1926, has been completely owned and operated by the Reichsbank, and through the fiction of the Gold Discount Bank, the

Reichsbank is enabled to perform many functions prohibited to it by its own charter. Time and time again the Reichsbank has used the Gold Discount Bank for some particular end of its own when, if limited to its own legal powers, such steps would have been clearly illegal.

There is a questionable ethical validity (if not legal) to the Reichsbank's use of the Gold Discount Bank. The Bank Act of August 1924, which, as we have seen, limited the business of the Reichsbank to fields considered safe for sound central banking, may have hedged the Reichsbank about with too many restrictions. The peculiar situation of the German post-war money market, with its shortage of short and long-term capital, may have demanded greater scope for the central bank than was granted to it. The desire to control all fields of economic activity rather than to center its attention solely on the maintenance of a sound currency may have developed rapidly in the post-war decade. All of this may justify the extra-ethical means taken to achieve mastery of the monetary and economic situation. It may be that in some later revaluation of central banking theory we shall find the German experiment with the Gold Discount Bank of invaluable aid in the rewriting of central bank laws. It remains true, however, that through the Gold Discount Bank, the Reichsbank is enabled to carry on many transactions that are prohibited to it in its own charter, while it is itself legally and financially responsible for those same transactions. Any discussion of the Reichsbank in the years 1924-1933 must be interpreted in the light of the Reichsbank *plus* the Gold Discount Bank. We shall never be able to lose sight of this convenient " daughter ".

The Gold Discount Bank was founded in March 1924 for the special purpose of guaranteeing the stability of German export credits. It was originally one of those transient institutions essential because of foreign distrust of the new rentenmark and was designed primarily as a liaison bank between German exporters and their foreign customers. Its authorized capitalization was ten million pounds sterling,[24] five million of which was borrowed abroad by the Reichsbank and the other five million pledged (but never fully paid in) by a syndicate of German bankers. The amount of its paid-in capital was between six and seven million pounds sterling until 1926, when the Reichsbank, for reasons of its own, increased the capital to the legal maximum. The bank was granted the right to issue notes backed by foreign gold currencies but no use was ever made of this privilege, and after the reorganization of the German money and banking system in August 1924 its note issue privilege was taken away and provision was then made for the gradual liquidation of the affairs of the Gold Discount Bank by the Reichsbank. Before the Dawes Committee concluded the investigations that led to renewed foreign confidence in the stability of the new reichsmark, the bank served admirably as a source of export credit. Its credits increased from March 1924 to a high point of 14.02 millions of pounds sterling in August 1924; thereafter, these credits decreased gradually until, by May 1925, they amounted only to 3.36 million pounds sterling.[25]

In 1926, the shares of the Gold Discount Bank held by the private banks were acquired by the Reichsbank and the institution came wholly under its control. By this time the original function of the Gold Discount Bank had completely disappeared, for the German currency was reestablished in the foreign markets of the world and the German banking system was capable of handling its export and import trade in its own

24 The capital of the Gold Discount Bank was kept in terms of the pound sterling and all of its transactions were carried on in this currency because of the lack of faith, both domestic and foreign, in the rentenmark. Five million pounds was loaned to Germany by foreign bankers to enable her to create the Gold Discount Bank; the remaining five million pounds was to be raised within Germany, but only a small amount of this could actually be found at the time. The Gold Discount Bank was approved by the Dawes Committee of experts, which was sitting in Paris at the time, with the understanding that it would be absorbed later by the reorganized Reichsbank.

25 *Die Reichsbank, op. cit.*, p. 114.

currency. There was no reason, therefore, why the affairs of the bank should not have been quickly liquidated by the Reichsbank. Instead of liquidation and gradual disappearance, this institution took on new strength. Its capitalization was increased up to the full amount authorized in the original charter (ten million pounds sterling). Thereafter, the Gold Discount Bank was used by the Reichsbank to further certain policies considered essential to the economic well-being of the country but impossible of attainment by the Reichsbank alone because of its charter limitations.

Ostensibly, the purpose of the reorganized Gold Discount Bank was to further all government undertakings having to do with the import trade. Actually, the Gold Discount Bank performs many functions for the Reichsbank. It aids in the control of the money market through the use of public funds and through the purchase of private discounts. It supplies credits to agriculture, and it grants support credits to banks. No complete analysis of the affairs of the Gold Discount Bank is possible, for many of its transactions are clothed in secrecy—in fact, in 1933, it was made a criminal offense for anyone connected with the bank to reveal anything connected with its business. The following illustrations, however, throw some light on the nature of typical transactions.

The Gold Discount Bank was especially important as an aid to the Reichsbank in its struggle to gain control of public funds. Forbidden by its own charter to pay any interest on deposits, the Reichsbank was handicapped in competition with the State banks and the private Joint Stock banks in receiving these funds for deposit. Under cover of the Gold Discount Bank, interest on public money was offered and these large sums were then used on the Berlin money market for the special purpose of rebuilding the private discount market. Furthermore, the Gold Discount Bank was not limited as was the Reichsbank in the type of bills it could purchase.

In 1926, the Reichsbank through the Gold Discount Bank was able to encourage agricultural credit by taking over 7%

three to five-year bonds from the *Rentenbank-Kredit-Anstalt* to the amount of 250 million reichsmarks. The money for the purchase of the bonds was supplied by the Reichsbank in foreign exchange and was transferred to the Gold Discount Bank for the ostensible purpose of increasing its capitalization. The Gold Discount Bank paid the foreign exchange to the *Rentenbank-Kredit-Anstalt* and the latter bank exchanged it for Reichsbank notes, which were then loaned to German agriculture.[26] The Reichsbank's foreign exchange was thus left as it was before the transaction took place but its circulating notes were increased by the amount of the loan. These bonds were either redeemed or renewed from 1929 to 1931.

When the Reichsbank could not master the money market in December 1926 because that market was dependent upon the strong inflow of foreign funds, it used its two subsidiaries —the Gold Discount Bank and the Rentenbank—to create special bills to sell on the open market. The bill portfolio of the Bank was particularly low at this time and, as was pointed out above, the Reichsbank had no means of engaging in open market operations to drain the market of surplus funds. This operation was, in effect, an attempt at open market control through the use of its subsidiary banks. In this connection the Rentenbank sold three to five-year bonds to the Gold Discount Bank for three-month promissory notes of the Gold Discount Bank (143.1 million reichsmarks). These notes were then sold on the open market; they were paid back at the end of three months with the exception of fifty million reichsmarks that were taken over by the *Verkehrs-Kredit-Bank*.[27] This bank (the *Verkehrs-Kredit-Bank*) further supported the Gold Discount Bank in 1927 with a loan of 100 million reichsmarks which the Gold Discount Bank invested in private discounts.[28] The Gold Discount Bank also invested reparations funds in private discounts

26 *Annual Report of the Reichsbank*, 1926.

27 *Die Reichsbank, op. cit.*, p. 115.

28 *Ibid.*, pp. 115-116.

on the short-term money market (April 1, 1927, fifteen million reichsmarks; July-August 1927, forty million).

The Gold Discount Bank played a prominent part in the reorganization of the private Joint Stock banks which took place in February 1932. At this time, the share capital of the bank was increased by 200 million reichsmarks (to a total of 400 million reichsmarks),[29] and the new shares thus created were exchanged for shares in the Joint Stock banks; through this, the Reichsbank, using the fiction of the Gold Discount Bank, became part owner of the largest commercial banks in the country.

Some indication of the nature of the business of the Gold Discount Bank is shown in Table X.

From a study of these figures it is evident that in the purchase of bills and checks and in rediscounting, the Gold Discount Bank was carrying on a business which considerably broadened that of the Reichsbank. The importance of the Gold Discount Bank to the central bank is most startling, however, when one examines the amount of securities purchased by the Gold Discount Bank. The Reichsbank was prohibited from engaging in open market purchases and sales of securities on its own account but the Gold Discount Bank was actually engaged in extensive security purchases. The amounts held ranged from eleven to fourteen billion reichsmarks in the two years 1927 and 1928.

The German bank inquiry of 1926-29 gave considerable attention to the Gold Discount Bank. It summarized its investigation as follows: " Through the Gold Discount Bank the activity of the Reichsbank is supported and broadened. The business of the Gold Discount Bank is not legally hemmed in as is that of the Reichsbank. The support of the Gold Discount Bank to the Reichsbank comes essentially through its ability to guarantee export credits through the purchase of bills with a currency of from three to nine months whereas the Reichsbank

29 The capital of the Gold Discount Bank remained in terms of the pound sterling to the end of 1931, when it was converted into reichsmarks.

TABLE X. DEVELOPMENT OF IMPORTANT ASSETS AND LIABILITIES OF THE GOLD DISCOUNT BANK, 1927 AND 1928 [a]

	In 1,000 £ Sterling					
Date	Bills and checks	Redis-counted bills	Securities	Daily money	Lombards with the Reichsbank	Promis-sory notes
1926						
December 31	379.2	3,730 8	11,701.7	23.7	970.8	3,553.6
1927						
January 31	1,406.0	2,318.8	11,135.8	16.7	——	4,557.5
February 28	9,638.0	2,927.7	11,859.8	14.9	8,943.8	4,557.5
March 31	7,237 5	2,844.6	13,269.1	7 4	9,132.2	3,452.4
April 30	6,305.6	2,663.0	13,201.7	2,463.2	6.593.0	2,450.1
May 31	7,883 3	2,179.3	14,085.6	4,892.1	6,598 0	2,450.1
June 30	3,168.9	1,814.6	14,001.4	4.918.4	4,352.2	——
July 31	9,888.5	1,583.9	13,896 9	7,656.0	8,076.4	——
August 31	6,022.6	1,311 3	13,786.9	5,466 6	6,363 2	——
September 30	5,711.1	1.188 5	13,375 9	5,747.9	5,384.2	——
October 31	6,210 1	1,118.3	12,855.3	6,189.1	4,894 8	——
November 30	11,067.1	1,144.3	14,250.0	4,997.6	12,292.0	——
December 31	1,081.9	2,396 8	13,719 9	1,526.8	5,212.9	——
1928						
January 31	502 3	2,533.1	13,640.0	2,082.6	3,401.9	——
February 28	1,082 9	2,536 3	13,630.4	3,736.9	2,359 3	——
March 31	2,915 0	2.506.5	13,172 8	6,084.9	1,380.3	——
April 30	314.7	2,218.6	12,759.1	3,426.6	1,062.2	——
May 31	2,839 3	2,320.0	12,494 8	2,079 7	4,638.7	——
June 30	1,918.0	1,940 2	12,434.3	2,978.8	2,783.5	——
July 31	4,973.7	1,557.6	12,360.0	3,880 5	4,532.5	——
August 31	390.5	2,061.2	12,264 6	2,606.3	1,174.7	——
September 30	2,085.7	1,830.2	12,022.4	5.151.7	97.9	——
October 31	7,051.8	1,665.8	11,972.6	10,033.8	73.4	——
November 30	2,609.3	2,107.5	11,856 5	5,624.0	——	——
December 31	804.0	2,065.8	11,715.9	3,925.2	——	——

[a] According to the monthly reports of the Gold Discount Bank.

is limited to three-month bills. The broadening of the sphere of activity comes largely through undertaking certain types of business that are expressly forbidden to the Reichsbank, such as the purchase of promissory notes, the purchase of bonds from the *Rentenbank-Kredit-Anstalt* for the granting of long-term credits to agriculture, the payment of interest on deposits (particularly on public funds), the granting of acceptance credit, the purchase of securities on its own account, and the like. . . . It is questionable how far the Reichsbank through these uses of the Gold Discount Bank is indirectly burdened with risks which could endanger the security and liquidity of the Reichsbank's investments. The Gold Discount Bank had a share capital and reserve of 188 million reichsmarks (end of 1928) which serves as a cushion between the Reichsbank's liability and the Bank's liquidity. . . . In summary, it can be said that the tasks which the Gold Discount Bank performed were economically important and that they have been carried out without economic injury (*Schaden*). Wholly independent of these advantages, however, is the basic idea of the existence of a daughter institution whose capital is owned by the Reichsbank and whose management is identical with it and whose business freedom loosens the legal limits placed upon the central note bank." [30]

In spite of the implied criticism of the Reichsbank's use of the Gold Discount Bank by the banking commission of 1926-29, the Gold Discount Bank continues to be a very important adjunct to the Reichsbank and to Reichsbank control devices.

30 *Die Reichsbank, op. cit.*, pp. 116-119. (Free translation.)

CHAPTER III

THE COMMERCIAL BANKING SYSTEM

Any discussion of the control policies of a central bank is incomplete without an understanding of the organization, integration, and banking practices of the commercial banking system over which that control operates. The banking system of every country develops with its commercial and industrial life. Habits, customs, and techniques which work well in one nation may be wholly inapplicable in another. This becomes increasingly clear as one studies the central bank of Germany operating in the continental setting of mixed banking as opposed to the Bank of England with its Anglo-Saxon tradition of separation of banking functions. Our ideas of central bank control are derived from English experience; whether or not they are applicable to German banking remains to be seen.

All banks in Germany belong to the commercial banking system. In fact, the use of the word *commercial* to denote a particular type of bank engaged in receiving deposits and carrying on short-term lending operations is itself an Anglo-Saxon concept. *Composite* or *mixed* banking refers to the combination of deposit, short-term lending, investment, and brokerage functions in the same institution. The allocation of specific banking functions to separate banking institutions has not been a part of the heritage of German banking. English and American writers usually refer to this *mixed* character of German banking as something that sharply differentiates the German practice from their own. In America, we have been accustomed to think of commercial banks, investment banks, brokerage houses, trust companies, mortgage bond companies, and savings banks as separate institutions. Although we frequently found two or more of these operations combined in the same institution, such as the typical combination of commercial banking with the holding of savings deposits, the functions themselves were thought to be separate and were hedged about by different legal requirements. Recent examinations of banking practices in America, however, have revealed the fact that American commercial banks have many of the characteristics of mixed banking. Commercial banks can no longer be thought of as pure receivers of deposits and short-term lenders with an emphasis on liquidity of assets. There is, probably, not as great a difference as we have liked to think between the "separate" banking of the Anglo-Saxon tradition and the "mixed" banking of Germany.

Just as American bankers have developed more and more toward an amalgamation of banking functions, so the German banks, which began with special functions and purposes, have broadened their businesses to include all types of banking. The older German State banks were slow to enter into the deposit, lending, and brokerage business. Until recently, the savings banks remained purely savings institutions. Private bankers in Germany are still called upon to render the specialized service that brought them into being, although they too have been forced to develop and broaden their business in order to compete successfully with other banking institutions. But it was the Joint Stock banks, the "upstarts" of the post Franco-German war period, that determined the broad outlines of the present character of German banking.

The fact that German commercial banking began its period of rapid development after the Franco-German War of 1870, when the new nation was shifting its economy from agriculture to industry under pressure of "catching up" with the older industrialized nations, gave to the banks a special interest in the new industrial enterprises. The Joint Stock banks which came into existence at this time took the lead in developing the typical form of the commercial credit business in Germany. Thus, in the earlier stages, the German credit banks were not only interested (as are all credit banks everywhere) in facilitating the flow of goods, but they were equally interested in seeing that the stock of German manufactured goods was increased and that new markets, both domestic and foreign, were created to absorb the increase. In Germany—a new nation—new industries, with a crying need for capital and markets, and the new Joint Stock banks developed hand in hand. As a need arose, the new banks reached out and supplied it, creating in Germany a banking system in which true commercial functions and investment functions were intermixed.

The older State and private banks, preoccupied largely with State finance and prejudiced against the new Joint Stock banks and their practices, remained aloof. But as the Joint Stock banks began to encroach upon their territory and to compete actively with them for their own type of banking business, they were forced to broaden their activities and to enter into the commercial banking business in active competition with the Joint Stock banks. Thus, in three decades of their development (1870-1900), the Joint Stock banks succeeded in shaping a pattern for German banking that was gradually adopted by the more specialized institutions in the early twentieth century. The influence of these banks on banking practices in Germany was to broaden the base of the short-term credit business and to force the recognition of mixed banking as the customary German banking procedure. In the pre-war period, however, commercial banking was still confined very largely to the Joint Stock banks and to the large private bankers. The Joint Stock banks did not feel the competition from State banks, savings banks, and coöperatives. They were engaged in an active competition among themselves which led to rapid expansion through the establishment of branches in every city in the Reich and to the unification of these banks into large systems headed by the Berlin Great Banks or, in some instances, to systems headed by large provincial banks.

The war and the subsequent inflation profoundly affected the German banking system. The most important change was to bring all banks into active competition in the short-term credit business. The collapse of the capital market as the inflation progressed destroyed the mainstay of the business of the savings banks and the State banks; their only outlet for funds was in short-term loans. New banks were founded on a slender capital margin to handle the tremendous business turnover; new public banks began to assume importance in the money market. These changes were to prove permanent and were to affect the business of commercial banking in the post-stabilization period.

The stabilization of the currency in November 1923 revealed the impaired capital structure even of the strongest banks and completely wiped out of existence many of the weaker ones. Once more, as in the early days of the 70's, the German banking system was forced to stretch its limited capital to supply the entire money and capital needs of the country. It was now not only a question of " catching up " with the rest of the world; upon the German banks rested the task of saving the entire domestic economy from complete collapse. Under these two pressures, the stamp of approval was finally placed upon composite or mixed banking as the pattern of all banks in Germany. In the post-stabilization period all banks, to a greater or lesser degree, engaged in the deposit and short-term lending business, the brokerage business, and the investment banking business. The Joint Stock banks began to compete for savings deposits, large and small; the savings banks entered into the short-term personal loan business; everywhere retrenchment, consolidation and centralization went on. Competition became more keen, if anything, until the pressure finally forced working agreements on the competing banks in the interests of the whole economy.

In order to understand the position of the Reichsbank as the central bank of Germany and its ability to dominate the German money market in the decade under discussion, it is essential to consider more specifically the organization and interrelationships of the groups of banks making up the commercial banking system. It is not our purpose here to analyze exhaustively German banking in the decade 1924-1933. We are interested, primarily, in the structural organization and integration that unites the Reichsbank with the banks, the money market, and the capital market. We are interested also in banking and business habits and techniques that influence the control policies of the Reichsbank and are in turn influenced by them. Since German banking, however, underwent changes of significance during this decade, we will be forced to consider, in broad outline, the history of each of the main groups of banks belonging to the commercial banking system.

The banks belonging to the commercial banking system have been classified by Dr. Ernst Walb, Professor at the University of Cologne, as follows: [1]

I General Credit Banks
- A. Private Banks
  - a) The Great (Joint Stock) Banks, with branches and affiliates
  - b) The Provincial Banks with branches and affiliates
  - c) Joint Stock Banks without branches
  - d) Private Bank Firms
- B. The Public Banks
  - a) Savings Banks
  - b) Municipal Banks
  - c) The Girozentralen (Central Clearing Associations)
  - d) State, Land, and Agricultural Banks
  - e) The Note Banks
- C. The Coöperative Credit Associations

II Specialized Banks, such as
- a) Export and Import Banks
- b) Foreign Exchange Banks
- c) Banks related to specific industries or trades

III Support Institutions

While this classification gives one a convenient tool for analysis, its subdivisions cannot be looked upon as mutually ex-

1 Dr. Ernst Walb, "*Uebersetzung und Konkurrenz im Deutschen Kreditapparat,*" *Untersuchung des Bankwesens, op. cit.*, Part I, Vol. I, pp. 114-196.

clusive. The basis of grouping here has been from the standpoint of the type of business carried on. A broader classification under the heading of Private Banks and Public Banks would throw all of the support institutions (Group III) into the group of Public Banks. Some of the specialized banks (Group II) would be classified as public and some as private, while one bank at least, here considered as a private share bank without affiliates (the *Reichs-Kredit-Gesellschaft*), would become a publicly owned institution. We shall, however, follow in general the above classification, in order to point out the major differences between the groups as well as to gain some estimate of the relative importance of each group to commercial banking as a whole. It also gives us a convenient skeleton structure with which to follow the development of banking in the past ten years.

The Private Banks (Exclusive of Private Bankers)

There is so much similarity and actual interlocking of control between the Great Banks with branches and the provincial banks with branches, as well as between the Berlin Great Banks which have branches and those which have not, that it seems more satisfactory to discuss these three groups together. Moreover, the history of these banks in the decade 1924 to 1933 is a history of further integration and consolidation in which the boundaries between them become even more difficult to distinguish.

The term *Great Bank* has a special meaning in Germany. It refers only to the large Joint Stock banks (or G.m.b.H. Companies)[2] which had reached by 1914 a power and prestige sufficient to influence materially, if not wholly to dominate, the

2 The distinction between a Joint Stock bank and a G. m. b. H. company (*Gesellschaft mit beschrankter Haftung*) is one which is based upon its legal form of organization. Joint Stock companies are similar to the American corporation; the company with limited liability may be said to be approximately halfway between a partnership and a corporation. See Philip Whale, *Joint Stock Banking in Germany* (London, 1930), pp. 331-333.

credit life of the nation. There were twelve Great Banks in Germany in 1924, eight in Berlin and four in the provinces. The eight Berlin Great Banks were the four D-banks—the *Deutsche Bank,* the *Disconto-Gesellschaft,* the *Dresdner Bank,* and the *Darmstaedter und Nationalbank,* and four others, the *Commerz und Privat Bank,* the *Mitteldeutsche Creditbank,* the *Berliner-Handels-Gesellschaft,* and the *Reichs-Kredit-Gesellschaft.* The two latter banks have no branches and operate only in Berlin, but their business is such as to influence the business and industrial life of the whole nation.

The *Reichs-Kredit-Gesellschaft* belongs wholly to the period under discussion. It was founded in 1922 for the special purpose of watching over the interests of the Reich in industrial undertakings. In 1924, it was reorganized into a share company with a capitalization of thirty million reichsmarks (increased to forty million in 1925). The shares are all owned by an industrial holding company of the Reich known as the VIAG (*Vereinigten Industrieunternehmung Aktien Gesellschaft*). In spite of the fact that this bank came into existence only in 1922, it has developed its business rapidly until it is comparable in influence to the older Great Banks. It carries on a regular banking business in addition to its handling of Reich industrial affairs; and, as do the other Berlin banks, it acts as a central banking institution for many of the larger and better known provincial bank firms.[3] It is also well known in foreign markets

3 It is difficult to find any term that exactly expresses the relationship of the large Berlin banks to their banking affiliates. To some extent, the relationship is similar to that which exists between the twelve Federal Reserve Banks and their member banks. The Berlin Great Banks hold deposits for other banks, grant them rediscount facilities, make loans on collateral, serve as clearing and collection centers, and buy and sell for them as brokers on the Berlin stock exchange. The whole arrangement, however, rests upon mutual association and agreement and has grown out of the necessity of keeping deposits in Berlin as that city developed into the money market of Germany. I have used the term *central banking institution* to indicate this relationship, although it should not be confused with the term *central bank* which is reserved for the Reichsbank and has the definite connotation of control for a public purpose.

where it has been able to borrow in its own name. Its influence in the Berlin money market is equal to and, in some respects, greater than that of any of the other Great Banks.

The four provincial Great Banks (all with branches and affiliates) were, in 1924, the *Bayerische Hypotheken und Wechsel Bank,* the *Bayerische Vereinsbank,* both in Munich, the *Allgemeine Deutsche Credit Anstalt* with headquarters in Leipzig, and the *Barmer Bank Verein* of Düsseldorf. As Berlin became more and more the money market of Germany, these provincial Great Banks formed banking connections in that city, usually with the *Berliner Handels Gesellschaft* or with the *Reichs-Kredit-Gesellschaft.* The eight Berlin Great Banks, through the control of their own branches (more than 900 in 1924), or through affiliations with the provincial Great Banks with their branches (more than 390 in 1924), or through direct working agreements with the small provincial network of branch banks (about fifty-eight main banks with 1,548 branches), had by 1924 brought under their control either directly or indirectly approximately 2,894 private Joint Stock banks in all parts of the Reich.[4] All of the private Joint Stock banks were thus united into large systems headed by the eight Berlin Great Banks. The Berlin banks act as central banking institutions for their branches and affiliates. They tend, therefore, to keep their portfolios more liquid than those of their affiliates and they have become the great money lenders in the Berlin money market.

4 These figures are only approximate. The 1929 bank investigation gives these branch bank figures for the end of the year 1923. The figures, however, include only five of the Berlin Great Banks and three of the provincial Great Banks; the two banks omitted from the statistics are the *Mitteldeutsche Creditbank* and the *Bayerische Vereinsbank* (*Der Bankkredit,* Berlin, 1929, p. 9). The figures for the smaller provincial banks with affiliates were published in the 1933 bank investigation for the years 1913 and 1932), (*Untersuchung des Bankwesens, op. cit.,* Part I, Vol. I, p. 120). I have used the 1913 figures as more representative of the position in the year 1924, although if these banks followed the same tendency as the Great Banks toward branch bank expansion during the war and the inflation period, they would have shown a material increase for 1924 over the quoted figure.

Although their capital and reserve had been decreased by more than sixty-five per cent through the inflation and the subsequent stabilization, the Berlin Great Banks were, in 1924, in a strategic position to enter into the task of rebuilding the demoralized economy. The general confusion in the money and capital markets in the immediate post-inflation period and the total lack of working capital in Germany threw the task of reconstruction largely onto those institutions whose function it was to supply capital. They were faced with increasing demands for funds at a time when their own working capital was greatly diminished. The private discount market had collapsed, lack of confidence in the profit-making capacity of German industry made the flotation of new shares practically impossible, long-term bond issues could not be sold in the domestic market, and foreign funds were slow at first to relieve the tension. The credit banks, however, had certain advantages. They were highly organized national institutions with a network of branches and allied banks throughout the Reich. The character of their business made them familiar with all phases of industry. And the close connection with industry that has always been a feature of Joint Stock banking in Germany made it possible for them to force through policies of industrial reorganization, consolidation, and retrenchment. The international connections of the Joint Stock banks gave them a certain prominence in the international money markets, and as soon as the Dawes Plan had revived confidence in the German monetary system, these banks were able to borrow in foreign markets. With the aid of foreign funds, the Joint Stock banks quickly recovered their own lost strength and were able to support the remarkable recovery of the German economy from complete collapse in 1924 to relative prosperity in 1927. The mixed character of the business of the Joint Stock banks was responsible as much as anything else for that revival.[5]

5 For a complete analysis of the business of the Joint Stock banks, see Philip Whale, *op. cit.*

The close connection of the credit banks with the capital market, the bourse, and the issue business rested, in the pre-war days, on the habit of making large over-the-counter bank loans to industry, and, when the time was ripe, converting the industrial debit into a bank credit by floating in the capital market stocks or bonds to cover the bank debt and to supply industry with fresh long-term capital. This was perhaps the most characteristic feature of German banking. It was this practice which irretrievably mixed commercial banking and investment banking. The bank loan to industry was really an intermediate loan carried by the bank with the certainty of conversion into securities at some not too distant date. The successful flotation of industrial securities was counted upon to keep the bank's position sufficiently liquid to meet easily its demand liabilities. This integration between industry, the credit bank, and the capital market worked, in the pre-war period, smoothly and efficiently. These three units were coordinated into one whole which depended for its success upon the continued cooperation of the parts. In the post-stabilization period, this system broke down because one of its essential parts was so completely destroyed that it failed to contribute its share in the essential trilogy. The capital market was shattered by the inflation and throughout the entire ten years under discussion, it failed to revive sufficiently to take over its old function.

The failure of the capital market to assume its old role in the German economy is one of the most basic structural changes of the decade from 1924 to 1933. It had a far-reaching influence upon the stability of the banking system. From 1924 to 1927 only a small portion of the existing bank loans could be converted into securities, and after 1927 practically none at all. The long association of the banks with industry made it impossible for them to break the habit of meeting all of the credit needs of their customers, in so far as their resources permitted. They therefore continued to supply their customers with short and long-term loans at comparatively high interest rates, and depended upon foreign funds to make continued bank loans

TABLE XI. THE LIQUIDITY OF THE BERLIN GREAT BANKS; 1913, 1924 TO THE MIDDLE OF 1930 [a]

Year end	Cash plus Giro deposits	Deposits with other banks (including foreign deposits)	Bills, Reports [b] and Lombards	Total columns 1 + 2 + 3	Deposits due within 7 days plus demand deposits of German bankers	Total liabilities	Cash liquidity column 1 in % of column 5	Further liquidity; columns 1 + 2 in % of column 5	Total liquidity; column 4 in % of column 6
	1	2	3	4	5	6	7	8	9
	In millions of marks or reichsmarks						In %		
1913	334	300	2,314	2,948	2,696	5,503	12.4	23.3	53.6
1924	183	617	1,063	1,680	1,869	3,132	9 8	42.8	53.6
1925	229	630	1,334	2,193	2,344	4,649	9 8	36.6	47.4
1926	246	759	2,229	3,234	3,137	6,149	7.8	32.0	52.6
1927	309	989	2,339	3,637	3,333	7,712	9.3	38.9	47.2
1928	369	1,124	3,122	4,615	4,595	9,847	8.0	32.5	46.9
1929	382	1,171	3,304	4,857	4,892	11,446	7.8	31.7	42.4
1930 [c]	261	963	3,494	4,718	5,205	11,677	5.0	23.5	40.4

[a] *Der Bankkredit*, *op. cit.*, p. 137. This table covers the figures for the *Deutsche Bank*, the *Disconto-Gesellschaft* (combined in 1929), the *Dresdner Bank*, the *Darmstädter und Nationalbank* and the *Commerz und Privat Bank*.

[b] "Reports" are essentially stock market loans on security collateral.

[c] Figures for 1930 are as of June 30.

possible. This meant that a large portion of long-term industrial finance in Germany was carried by the banks in the form of " debtors in current accounts ".[6] The banks were borrowing short-term funds in foreign markets and using them as the basis of long-term (and frozen) industrial loans. The effect of borrowing short and lending long on the liquidity of the German banks is shown in Table XI.

An examination of the figures in the Table brings out the fact that the banks continued to supply their clients' demands at the expense of their own liquidity. If one realizes that about 50% of the total liabilities of the Berlin Great Banks in the middle of 1930 were short-term foreign deposits (at least five billion reichsmarks), which carried an added foreign exchange risk, the shaky foundations of the credit of the Joint Stock banks becomes increasingly clear. Then, too, one should note the tremendous increase, both absolute and relative, of the interbank balances (Column 2) which, as a matter of fact, is a disguised dilution of cash in an extreme form. If one analyzes the cash liquidity of the Berlin Great Banks (Column 7) one finds that these percentage figures give no true picture of their actual position. Both foreign short-term deposits and interbank deposits, which made up by far the largest proportion of short-term liabilities (Column 5), are demand liabilities of a dangerous type—especially dangerous when the cash ratio is only five to ten percent. Furthermore, not only did the cash liquidity decrease dangerously, but the total liquidity also decreased. Here, again, one must analyze the changes that weakened the strength of bank assets and increased the danger of bank liabilities. Customer loans were frozen because of the

6 The current account is the backbone of German banking. It is a broad term covering all possible banking services that can be rendered to a customer from the granting of loans to the holding of valuables for safekeeping. The current account rests upon a contractual agreement between the bank and its client. A client may be at times in debt to his bank and at other times he may have creditor claims upon it. The banks carry their current account items on their balance sheets as " Debtors in Current Accounts " and " Creditors in Current Accounts ". For an excellent description of the use of the current account by the Joint Stock banks, see Philip Whale, *op. cit.*

failure of the capital market to absorb new issues; bills, reports, and lombards were less liquid investments than in the pre-war days because of the changes in the Reichsbank law which made

Table XII. Total Assets of the Berlin Great Banks [a]
December 31, 1924 to 1932

Bank	1913	1924	1925	1926	1927	1928	1929	1930	1931	1932
	In millions of reichsmarks									
Deutsche Bank	2,246	1,091	1,541	1,853	2,320	4,623	5,534	4,924	3,549	3,259
Dresdner Bank	1,538	795	1,163	1,567	1,885	2,347	2,513	2,529	3,440	3,037
Disconto-Gesellschaft	1,238	637	919	1,121	1,411	—— [b]	——	——	——	——
Darmstadter und National	1,404	785	1,012	1,511	1,772	2,313	2,622	2,555	—— [c]	——
Berliner-Handels-Gesellschaft	551	161	245	386	388	461	503	468	369	326
Commerz und Privat	508	449	695	902	1,268	1,619	1,877	1,805	1,392	1,591
Mitteldeutsche Creditbank	259	89	125	158	214	—— [d]	——	——	——	——
Total	7,744	4,007	5,700	7,498	9,258	11,363	13,049	12,281	8,750	8,213

[a] Compiled from statistics in *Die Bank,* Volumes XVII to XXVI, 1924 to 1933. These figures are not strictly comparable with the ones presented in Table XI (Column 6) because two banks are included here which were omitted from the liquidity statistics, the *Berliner-Handels-Gesellschaft* and the *Mitteldeutsche Creditbank.* Also, the figures for 1930 in the previous Table are as of June 30, 1930 rather than December 31. The figures in this Table include stockholders' liability, which was omitted from Table XI.

[b] Merged with the *Deutsche Bank* in 1929, known thereafter as the *Deutsche Bank und Disconto-Gesellschaft.*

[c] Merged with the *Dresdner Bank,* February, 1932.

[d] Merged with the *Commerz und Privat Bank,* 1928.

only portions of commercial bank portfolios rediscountable or eligible for use as collateral for loans at the central bank; foreign short-term liabilities might at any time be demanded.

In spite of decreasing liquidity, the total balance sheet figures of the Berlin Great Banks show a rapid expansion of bank credit. By 1927, the volume of business was greater than that of 1913, and by 1929 the total balances were almost fifty percent more than the pre-war figure. In Table XII the total figures carried on the balance sheets of the Berlin Great Banks are given for the years 1924 to 1932. It should be pointed out that, in making any comparisons of these figures with those for 1913, the amount carried on the balance sheet as stockholders' liability was much greater proportionately in 1913 than in the years of the decade under discussion. These figures bring out clearly the rapid expansion which took place in the assets and liabilities carried by the German banks from 1924 to 1929. In 1930 a slight decrease is noticeable, and from 1931 to the end of 1932 a very rapid shrinkage which reflects the effects of the 1931 banking crisis is noticeable.

This expansion of bank credit was no doubt partially responsible for the rapid industrial development in Germany from 1924 to 1928. The banks were bearing the entire credit burden usually shared with the capital market. That the German banks were able and willing to support the capital needs of industry through a time of severe capital scarcity is from one point of view highly creditable. The habit developed in the past of serving all of the credit demands of their clients—long-term as well as short—enabled the banks to prevent utter stagnation in 1924 and to encourage rationalization and expansion of the domestic economy until 1927. Although immediately profitable to them, this service rendered by the banks to the German economy led ultimately to their own destruction.[7]

The years 1929 to 1933 were important ones for the private Joint Stock banks. Under pressure of the world crisis and the collapse of international confidence, the Joint Stock banks began first to enter into new group agreements; then competition was limited by agreement; and, finally, they were forced to turn to the government for support in order to avoid bankruptcy. Of the twelve Great Banks in 1924, only six remained

7 See Table XI, Column 9.

in 1933. The *Berliner-Handels-Gesellschaft* and the *Reichs-Kredit-Gesellschaft* were the least affected of any of the Great Banks by the run upon the German banking system in 1931. The latter bank, in fact, became one of the prime supports of the banking system, and aided the government in carrying out its 1932 reorganization program. The two Bavarian banks, the *Bayerische Hypotheken- und Wechsel Bank* and the *Bayerische Vereinsbank,* lost their status as Great Banks and many of their branches were merged with the branches of the Berlin Great Banks. The *Barmer Bank Verein* was taken over completely by the *Commerz und Privat Bank* in 1932. Only the *Allgemeine Deutsche Credit Anstalt* remained of the four provincial Great Banks. The six Berlin branch banking systems were merged into three; the *Mitteldeutsche Creditbank* was taken over by the *Commerz und Privat Bank* in the latter part of 1928; the *Deutsche Bank* and the *Disconto-Gesellschaft* merged in 1929, and the bank is now known by both names (familiarly the DD-bank); the *Darmstädter und National Bank* failed in July, 1931, and was taken over by the *Dresdner Bank* as a part of the government's reorganization plan in 1932. The weakened capital structure of the banks after the crisis of 1931 was rebuilt by the government either through direct or indirect loans to the banks or through government purchase of shares of stock. Table XIII shows the extent of the government ownership of the shares of the Berlin Great Banks.

The Joint Stock banks in the ten years under discussion not only became more integrated under large independent systems centralized in Berlin, but the systems themselves came under public ownership. Far from being the privately-owned Joint Stock banks, more or less free from government supervision and control, as they were in the early years of their development, they are now to a large extent owned by the German government and the Reich is represented on the boards of the various banks in proportion to the shares held. There is a strong and well-defined opinion that the present situation is merely temporary and that as soon as the financial world returns to something approaching normality the Joint Stock banks will become again purely private institutions. In line with this contention, there is the new *Tilka Bank* which exists for the prime purpose of liquidating the indebtedness of the private banks to the German government. On the other hand, the whole direc-

TABLE XIII. GOVERNMENT STOCK OWNERSHIP IN THE BERLIN GREAT BANKS
Middle of 1933 [a]

Bank	Total share capital	Amount of shares held: By Reich	Amount of shares held: By Gold Discount Bank	Public shares as % of total
	In millions of reichsmarks			
Dresdner Bank	150	104	32.0	91
Commerz und Privat Bank	80	11	45.0	70
Allgemeine Deutsche Credit Anstalt	15	—	10.5	70
Deutsche Bank und Disconto-Gesellschaft .	144	—	50.0	35
Reichs-Kredit-Gesellschaft	40	40	—	100
Berliner-Handels-Gesellschaft	28	—	—	—

[a] Dr. Hermann Bente, *Das Eindringen des Staates und der Kommunen in das Bankwesen, Untersuchung des Bankwesens,* Part I, Vol. I, p. 396 and p. 398.

tion of change in the German banking system has been, since 1931, toward greater government control. The 1933 Bank Investigation Commission devoted a large amount of time to the consideration of the place of the private bank in the German economy and most of the prepared material placed a great emphasis upon the service rendered by the private banks. In spite of this, the present National Socialist government continues to bring the banking system more and more under its own control. It seems unlikely that private banking will be reintroduced in Germany for many years to come.[8]

PRIVATE BANKERS

Private bankers have always played an important part in German banking. In contrast to the Joint Stock banks which are chartered by the German government and are required to publish balance sheets at stated intervals, the private bankers were, until 1933, subject to no such regulations. Little was known, therefore, of the actual business they carried on, but since the days of the merchant princes—the Fuggers and the Rothschilds—the private bankers have had an aura of prestige, national and international, which the newer Joint Stock banks have never been able to acquire.

Some of the smaller firms are highly specialized in certain fields of operation, such as the issuing of securities or the brokerage business, but the larger international private bankers carry on a business which in size and character is comparable to that of the Berlin Great Banks. During the war and the inflation new firms were founded, but a great many of them failed with stabilization. From 1924 to 1928 there was a new wave of expansion which ceased abruptly as the depression began to be felt, and from 1929 to 1933 large numbers of these private bankers failed or merged with the Joint Stock banks. The total

8 Since this was written the *Dresdner Bank*, the *Disconto-Gesellschaft*, and the *Commerz und Privat Bank* have acquired their private status, see the *London Financial News*, October 7, 1937, p. 9. The news article comments that "the present regime professes to have no desire to participate in any form of industrial or financial enterprise but merely to see that such activities are conducted on party principle." It goes on to say that the return to private ownership was "especially to be expected as the State has complete control over all banking and financial operations through (1) the Reichsbank, (2) the Bank Commissar, and (3) the National Socialist Legislation passed since 1933."

number of private bank firms in Germany from 1925 to 1933 was as follows:[9]

	All firms	Those with deposit business
1913	1800	1221
1925	2500	1406
1930	2000	—— [a]
1933 (middle)	1350	709

[a] Figures not available.

The private bank firms with a deposit and lending business decreased in number by 697 from 1925 to 1933. In 1925 these bankers operated 245 branches throughout the Reich, but by the middle of 1933 the 709 remaining bankers had only 180 branches. Before the war, more than one-third (36.2%) of all the banks in Germany carrying a deposit and lending business were private banks; by the middle of 1933, the percentage figure had decreased to 23.3%.

The 1933 German bank inquiry gathered statistics for 533 of the 709 firms existing in 1932. 176 firms failed to report, but only three of these were large internationally known firms. It is estimated by the Reichsbank that the figures for the non-reporting firms would not materially affect the percentage figures although the absolute amounts would be, of course, increased. The totals carried on the balance sheets of the 533 reporting private bank firms amounted to 1,824.5 million reichsmarks on December 31, 1932, divided as follows:[10]

	Million Rm.
161 firms with a capital of less than 100,000 reichsmarks contributed 4% of the total balances or	68.7
307 firms with a capital of 100,000 to 1 million reichsmarks contributed 22% of the total balances or	405.7

9 Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat, op. cit.*, p. 122. In 1925, 640 of the firms were located in Berlin, 120 in Frankfurt-am-Main, and 330 in Hamburg (*Der Bankkredit, op. cit.*, p. 15, fnt.).

10 *Untersuchung des Bankwesens* (Berlin, 1933), Part II, *Statistiken*, p. 184.

54 firms with a capital of 1 to 5 million reichsmarks contributed 27% of the total balance or	491.2
11 firms with a capital of over 5 million reichsmarks contributed 47% of the total balance or	858.9

If one adds the figures for the three large firms not reporting, the total balances of the fourteen largest firms would be approximately 50% to 55% of the total. An analysis of the balance sheets of the reporting banks is shown in Table XIV. As the figures show, the larger proportion of the assets of the private bankers was invested in short-term assets and about 14% or 15% in true liquid investments—a slightly higher percentage than that of the Joint Stock banks. If one compares the total balance figures of the reporting private bankers with those

TABLE XIV. ASSETS OF 533 PRIVATE BANKERS, 1930 AND 1932 [a]

	Position on			
	Dec. 31, 1932		Middle of 1930	
	Millions of Rm.	%	Millions of Rm.	%
Total	1,824.5	100 0	3,092	100.0
Cash and deposits with Reichsbank	33.0	7.1	186	6.0
Deposits with other banks	96.4			
Bills and checks	117.1	7.3	220	7.1
Short-term treasury bills	15.6			
Other short-term credits, current accounts, reports, lombards, advances against goods, etc.	1,128.7	61.9	1,786	57.8
Total short-term credit	1,261.4	69.2	2,006	64.9
Securities and participations in bond flotations	189.7	10.4	475	15.4
Long-term loans	70.1	3.8	80	2.6
Other assets	173.9	9.5	345	11.1

[a] *Untersuchung des Bankwesens* (Berlin, 1933), Part II, "*Statistiken,*" p. 186.

of the Joint Stock banks (Table XII), some insight is gained into the position of the private bankers in relation to the Berlin Great Banks. Using only 50% of the total balance figures of the private bankers (the amount contributed by the fourteen largest bank firms which carry on a business comparable to the Berlin Great Banks), one finds that the private bankers contributed 11% in 1930 and 10% in 1932 of the combined balance sheets of these two groups. If it were possible to obtain accurate statistics for the six largest and internationally-known private bankers, no doubt these percentage figures would show a decided increase.

The six largest private bankers in Germany are Arnold Brothers (Dresden and Berlin), Simon Hirschland (Essen), A. Levy (Cologne), Mendelssohn & Co. (Berlin), M. M. Warburg & Co. (Hamburg) and S. Bleichroeder & Co. (Berlin).[11] These firms have extensive and close connections with some of the largest industries in Germany; one of them, at least (Mendelssohn & Co.), has been used for years by the German government both for short-term credits and for the flotation of long-term loans. These banks were the first after the inflation to receive foreign deposits. They were the first to be used by foreign governments, banks, and industrialists for the flotation of loans in the German market. They were (until 1931) able to borrow large sums in their own names in foreign markets.

The Berlin Great Banks and the larger private bankers wield a further influence over the credit life of Germany through their cooperation in the Berlin Bankers Association—the *Berliner Stempelvereinigung.* This organization had in 1923 twelve members, the four D-banks, the *Commerz und Privat Bank,* the *Berliner Handels-Gesellschaft* and six private bankers. The *Berliner Stempelvereinigung* regulates the debit and credit

11 Some of the larger private bank firms well known in the pre-war period were reorganized as G. m. b. H. companies after the 1923 stabilization. The most important of these which still retain the characteristics of private bank firms are the J. F. Schroeder Bank of Bremen and Hardy & Co. of Berlin.

interest rates of the current accounts of all of the Joint Stock banks and private deposit banks in Germany. It also fixes the rate for fifteen to thirty-day loans of all banks for the whole Reich (loans up to fourteen days are fixed by local banks). These rates are only customer rates and do not refer to the bank discount, report, and lombard rates nor to interbank rates on the open money market. There are one hundred other bankers' associations affiliated with the *Stempelvereinigung* throughout the Reich.

The Savings Banks

The history of the savings banks as operators in the short-term money market belongs wholly to the post-war period. Prior to 1914, these banks were purely savings institutions performing the function of gathering together the small savings of a large number of people and of investing in long-term securities. Their connection was primarily with the capital market. Since the proportion of withdrawals was always very small in relation to new savings, only a small percent, usually about six to ten percent of their assets, was in the form of cash or short-term loans.

Since the latter part of the eighteenth century the savings banks had been functioning in practically all German cities, large and small. They were usually municipally operated and were all subjected to State regulation. Furthermore, for the masses of the people, the saving process was almost wholly confined to the savings banks. The State banks and the Joint Stock companies made little or no effort to attract the small savings account.

Early in the twentieth century, the Joint Stock banks began to offer inducements to customers to open savings accounts. One competitive advantage to the Joint Stock banks was their ability to offer to transfer funds from savings accounts to current accounts, or to facilitate the transfer of funds from place to place through their network of branches. In 1909, this competition was partially met when the Reich passed the new Check

Law (*Scheckgesetz*) which, among other things, permitted the savings banks to circulate deposits through Giro accounts. The Giro account of the savings banks began to take on greater importance and to change, to some extent, their investment practice.

But it was the war and the subsequent inflation that completely transformed the business of the savings banks. In this ten-year period they lost their connection with the capital market and became operators in the short-term money market. Whereas at the end of 1913, 94.07% of their total deposits were invested in long-term securities (bonds, stocks, municipal loans), at the end of 1924 only 10.33% were so invested.[12] To be sure, this radical shift in investment practice was only temporary and there was a decided tendency to return to long-term investment in the decade 1924-33, but the savings banks continued to be large operators in the short-term money markets.

Several factors were responsible for the change in investment practice which took place between 1914 and 1924. In the first place, the German government definitely encouraged the development of the clearing system of the savings banks in an effort to conserve the use of cash during the war. To further this end, the Reich established in 1918 the *Deutsche Girozentrale,* a central banking institution for all savings banks. The Giro deposits of the banks increased rapidly, which forced the savings banks to keep a larger proportion of their funds in short-term liquid assets to cover the withdrawal claims that might be made upon them. In the second place, the business of lending to private customers developed under the stimulus of war loans. The savings banks were made payment places for war loans, and customers were encouraged to borrow from the banks in order to purchase government bonds—a process similar to the famous " borrow and buy " slogan of our own Liberty Bond campaigns. Gradually, the lending of small amounts to

12 *Ibid.*, pp. 152-153. Percentages were computed from data given.

clients for other purposes became a regular part of the business of the savings banks and the current account, hitherto unimportant, was added to the regular business of the banks. This increase in their current accounts necessitated a further increase in their short-term investments. But by far the greatest factor accounting for the change in investment policy was the inflation. Values of long-term investments began to shrink alarmingly as early as 1921, and in the later years of the inflation the long-term investment market collapsed. During the inflation, the savings banks used the whole of their available funds in short-term investments and it is probably because of this practice that their assets were not wholly wiped out in the stabilization process. In spite of this, however, their assets in 1924 were only 7.5% of those in 1913.[13]

With the revival of confidence in the latter part of 1925, pure savings deposits began to increase, at first slowly and then with a more rapid tempo. Dr. Curt Eisfeld has compiled some interesting statistics as to the length of time it took for savings deposits to accumulate.[14] He estimates that—

The	first	billion	Rm.	was	reached	in	April	1925,	*i.e.*	in	16	months
"	2nd	"	"	"	"	"	March	1926,	"	"	11	"
"	3rd	"	"	"	"	"	Dec.	1926,	"	"	9	"
"	4th	"	"	"	"	"	June	1927,	"	"	6	"
"	5th	"	"	"	"	"	Jan.	1928,	"	"	7	"
"	6th	"	"	"	"	"	July	1928,	"	"	6	"
"	7th	"	"	"	"	"	Dec.	1928,	"	"	5	"
"	8th	"	"	"	"	"	May	1929,	"	"	5	"
"	9th	"	"	"	"	"	Dec.	1929,	"	"	7	"
"	10th	"	"	"	"	"	July	1930,	"	"	7	"
"	11th	"	"	"	"	"	March	1931,	"	"	8	"

As a result of the banking crisis of the summer of 1931, there was an actual withdrawal of savings of about one billion reichsmarks. In 1932 and in 1933 there was a return of savings to the banks, but by December 31, 1933 the total amount was

13 *Untersuchung des Bankwesens* (Berlin, 1933), Part II, *Statistiken*, p. 184.

14 M. Palyi and P. Quittner, *Handworterbuch des Bankwesens* (Berlin, 1933), p. 525.

still 274 million reichsmarks less than the March 31, 1931 figure. Nevertheless, the total assets of the savings banks on December 31, 1933 were 591 million reichsmarks greater than on December 31, 1931; they were, however, only 69.84% of the 1913 figure.[15]

An analysis of the assets of the savings banks from 1924 to 1933 is shown in Table XV. These figures bring out clearly the permanent change in investment policy of the savings banks. In 1913 the investments of the banks in bonds, securities, and municipal loans were 94.06% of their total assets; in the following years shown in the table the percentage figures were 10.33%, 50.63%, 56.62%, 61.39% and 61.25% respectively. From the standpoint of the total amount of short-term credit available in Germany and the influence of the savings banks on the money market, this shift in investment policy is important.

TABLE XV. DISTRIBUTION OF ASSETS OF THE SAVINGS BANKS
1913; and 1924 to 1933[a]
(In millions of reichsmarks)

Assets	1913	1924	1927	1929	1931	1933
Cash and Giro deposits	243	48	111	137	127	120
Deposits with other banks	—	319	739	1,204	892	1,563
Bills	122	119	208	312	170	193
Short-term loans in current accounts ..	505	779	1,934	2,316	2,352	2,102
Bonds	13,116	78	2,063	4,145	5,246	5,555
Securities	4,056	21	899	1,140	1,916	1,884
Municipal loans	2,396	60	594	1,442	1,395	1,460
Other assets	364	112	475	884	1,839	1,651
Total	20,802	1,536	7,023	11,880	13,937	14,528

[a] *Untersuchung des Bankwesens, op. cit.,* Part II, p. 152.

15 *Untersuchung des Bankwesens, op. cit.,* Part II, p. 152.

The question of the degree of liquidity of assets required for savings banks was not regulated by Statute until 1927. The banks are now required to keep 30% of their total deposits (savings deposits plus Giro deposits) in the form of liquid assets. Liquid assets are defined as:

1. Cash, foreign currency, coupons.
2. Credits with the Reichsbank, private note banks, or post-check accounts.
3. Deposits with the Girozentralen (these must be 10% of the total deposits).
4. Private discounts dealt in on the bourse.
5. Bills of exchange acceptable to the Reichsbank for rediscount.
6. Lombard loans acceptable to the Reichsbank or to the public banks.
7. Short-term obligations of legal public credit institutions.
8. Demand loans secured by first class bonds or savings bank books.

The savings banks are now looked upon as competitors of the commercial banks in their own field and as permanent factors to be considered in the Berlin money market. In 1928 they joined the other banks in signing the agreement of fair competition (*Wettbewerbsabkommen*), and in December 1931 were with other banks subjected to the emergency decree (*Notverordnung*) which ordered a lowering of interest rates. In January 1932, the fixing of interest rates to be charged for loans and the amount of interest permitted to be paid on deposits was placed in the hands of the President of the Bourse who, in cooperation with the President of the Reichsbank, may change these rates from time to time. The rates so fixed are subject to review by regional credit committees but can only be changed through recommendations to the Central Credit Committee of the Bourse; changes of all kinds are subject to the approval of the President of the Reichsbank.

Since the 1931 crisis, the savings banks have developed a stronger interest in the granting of personal credit. In fact, at their annual meeting in 1932, the development of personal credit was made the center of their credit policy. They are taking steps with the support of the Reichsbank to provide discount facilities for domestic trade bills of small denominations in the hope of making more fluid the intermediate credits used by the small trader and business man. The importance of the savings banks in their relationship to business and to the money market seems to have been increasing since 1931. Since the National Socialist government came into power, the business of the banks has been subjected to more national regulation than was previously the case. In spite of some resistance on the part of the banks, a Savings Bank Commissioner for all of Germany was appointed in May 1933; his main duties are to bring about changes in the organization of the savings banks and the Girozentralen; the direction of change, in line with other National Socialist economic policies, is toward greater centralization and the breakdown of municipal control and control by the separate States.

THE GIROZENTRALEN (Clearing Associations) [16]

The Girozentralen are national, regional or State associations organized by the savings banks, the land banks, and the municipal banks for the purpose of furthering the transfer and clearance of checks drawn on savings accounts. They are also, however, regular banking institutions which receive deposits from the banks with which they are connected, other banks, and private individuals. They carry on the typical current account business, make loans to banks, and to industry, and lend money freely on the money market. There are nineteen regional clearing associations which operate one hundred and nine

16 I have omitted the municipal credit banks from this discussion because they are unimportant in the total credit life of Germany. They developed during the inflation years and a few (46 with 94 branches) continued to exist in the decade under discussion. They carry on a short-term credit business of an uncertain nature on small capital. Their combined balance sheets at the end of 1930 totalled only 605 million reichsmarks.

branches of their own. These have joined into one central organization known as the German Savings and Clearing Association. The central banking institution for this organization is the *Deutsche Girozentrale,* which was established by the government in 1918 and has come to be one of the most important banks in the Berlin money market. In addition to the regional Girozentralen, but allied to them through the *Deutsche Girozentrale,* there are two State associations controlled by the States of Bavaria and of Württemberg. The main functions of the Girozentralen are: (1) to serve as clearing houses for the checks drawn upon savings deposits; (2) to keep money fluid throughout the Reich through the pooling of deposits in central banking institutions; (3) to further the credit and commission business of the savings banks and to give these banks advice and counsel on all questions; and (4) to guarantee short and long-term municipal credits.[17] In the latter connection, the clearing banks have been particularly serviceable to the small and medium-sized cities in the post-inflation period. Pooled municipal loans guaranteed by the Girozentralen were able to tap the domestic and foreign capital markets at a time when the cities were desperately in need of funds and had, individually, a weak credit status in the world's money markets. It is certain that the capacity of the cities to borrow was increased by the Girozentralen.

The balance sheet figures of the nineteen regional Girozentralen are shown in the Table XVI (not including the *Deutsche Girozentrale*).

The short-term deposits of the Girozentralen are made up very largely of the deposits of savings banks, other money institutions and public departments. It is estimated that only about 15% of these deposits come from private persons, the remainder (85%) representing interbank deposits.[18]

17 Palyi and Quittner, *Handwörterbuch des Bankwesens, op. cit.,* pp. 232-234.

18 Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat, op. cit.,* p. 128.

The structural organization of the savings banks is thus highly centralized through the Girozentralen. There are large numbers of small, publicly-owned savings banks organized into nineteen larger units each headed by one Girozentrale. These nineteen regional Girozentralen are in turn organized into one large group headed by the central banking institution for the savings banks of the entire Reich—the *Deutsche Girozentrale.* The development of this form of organization belongs almost wholly to the decade 1924-33. The high degree of centralization of the savings banks and their entrance into the short-term deposit and lending business is one of the most basic structural changes that took place in the German banking system in the post-war period. In the ten years of development, the Girozentralen have come to be factors to be reckoned with in the money market.

TABLE XVI. ASSETS AND SHORT TERM DEPOSITS OF THE GIROZENTRALEN, 1926 TO 1932 [a]

(In millions of reichsmarks)

Year end	1926	1929	1930	1932
Total assets	1,894.6	3,999.8	4,550.6	4,547.3
Short-term deposits	1,159.8	1,854.8	1,944.1	1,710.7

[a] Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat, op. cit.*, p. 128.

The investment policy of the Girozentralen compares favorably with that of the large credit banks, although there seems to be a slight tendency for a greater investment in bills of more than three months duration by the Girozentralen. From 35% to 45% of their total deposits is kept in the form of liquid investments (cash, bills, deposits with other banks, daily money). These banks have been important influences in developing the short-term credit business of the savings banks; they have also served to centralize that business in the city of Berlin and to broaden the base of the Berlin money market. The Girozentralen were called upon to grant large amounts of support credits to the savings banks in the crisis of 1931 (about one billion reichsmarks). These credits were made possible by direct and indirect government loans to the *Deutsche Girozentrale* and were distributed to the savings banks by direct cash loans or through the unlimited rediscount of their acceptance credits. The deposits of the Girozentralen increased by ninety million reichsmarks in the year 1932, which enabled them to pay back a portion of the 1931 government loan. The Girozentralen have been subjected to the "rationalization" process of the National Socialist government in an effort better to integrate their functions. They have been, since May 1933, under the direct control of the Savings Bank Commissioner appointed by the government Minister of Economics.

The State Banks [19]

The State banks are public institutions owned and operated by the separate German States. Their history is bound up with local State development and the most important of them go back in time to the early nineteenth century—long before the new Germany of 1870 was formed as a federation of States. There are, in all, only nine State banks in Germany, five of them founded since the war and comparatively unimportant. Three of the others, the Bavarian, Thuringian and Saxon State banks carry on a business comparable in character to that of the Joint Stock banks. They operate branches throughout the State and their business is bound up with the private economy more than with State finance. The most outstanding State bank and one of the most important banks in Germany is the Prussian State Bank (*Preussische Staatsbank*), known generally as the Seehandlung. Comparable statistics for the four largest State banks are given in the following table:

19 It is especially important to remember that this section refers only to the years up to 1933.

TABLE XVII. SIZE AND EXTENT OF THE BUSINESS OF THE MAIN STATE BANKS, 1928 AND 1929[a]

(In millions of reichsmarks)

State bank of		Own capital	Deposits	Transactions	Net profit	State issue
Bavaria	1928	30,448	388,743	48,015	5,365	3,000
	1929	32,813	365,138	47,928	4,699	3,000
Prussia	1928	18,000	1,026,375	60,570	5,115	1,000
(Seehandlung)	1929	22,000	1,053,779	68,139	4,813	2,000
Saxony	1928	16,258	222,448	24,280	1,479	1,109
	1929	17,628	228,422	25,187	1,555	1,166
Thuringia	1928	2,250	119,295	7,100	656	200
	1929	2,700	118,548	——	553	250

[a] *Die Bayerische Staatsbank*, 1780-1929 (Munich, 1930), *passim*.

The nine State banks together showed total balance sheet figures in 1929 of 2,326.6 million reichsmarks; the balance of the Seehandlung alone was 1,082.7 million reichsmarks, or 46.5% of the total.[20] With the exception of the Seehandlung, the State banks compete with the Joint Stock banks and the private bank firms. Their business is comparatively small and local in character, but because of their long identity with State finance and State interests they have a prestige which the national banks have not been able to break down.

The State bank of Prussia, the Seehandlung, is, however, one of the most powerful banks in Germany. It is primarily a bankers' bank and before the war it competed directly with the Reichsbank and wielded a more powerful influence on the Berlin money market than any other bank in the nation—the Reichsbank not excepted. Because of the relationship of the Reichsbank to the Seehandlung in the years 1924 to 1933, and the frequent use of this State bank as a supplement to Reichs-

20 Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat*, *op. cit.*, p. 129.

bank control policies, a further consideration of the Seehandlung is desirable.

The Prussian State bank was founded in 1772 by Frederick the Great to further foreign trade. It soon became the banker of the State and, up to the World War, it was a State bank in the narrow sense of the word. The center of its business was State business. Its duties were to support State credit, to carry out all of the financial undertakings of the State of Prussia, and to keep its credit position extremely liquid so that the State could draw upon it at any moment. It was the identification of the new national government with the State of Prussia and the location of government in the capital of Prussia, Berlin, that gave national preëminence to the Seehandlung, made it at times the partner and at times the rival of the Reichsbank in the long and short-term capital markets, and made of it almost a second central bank. Before the war, its business consisted in the ordinary credit business of any commercial bank for its customers, its issue business and its stock exchange business. It largest customer was, of course, the Prussian State. The business of the State of Prussia included not only the handling of income and expenditure of the normal government business, but also vast sums from State-owned mines, railways, and post-offices. It was also the bank for insurance companies, hospitals, trustee accounts and the like, since the Prussian State guarantee of the business of the bank gave the Seehandlung a secure position not enjoyed by other banking institutions. It had also a select number of wealthy private customers, large landowners, State and government officials whose fathers and grandfathers had begun the family connection. It had, strangely enough, only two large industrial accounts, the North German Lloyd and the East Bank for Trade and Industry (*Ostbank für Handel und Gewerbe*) in East Prussia.

The vast sums of money at its disposal wielded a tremendous influence on the German money market. The Seehandlung placed sums, now large, now small, in short-term or long-term loans. The influence was due not so much to the absolute size of the amounts placed as to their relative strength and to the strategic position of the bank in the money center. The need of liquidity and security in its short-term investments led the bank to invest heavily in the treasury bills of the Prussian State and of the Reich. Since it was called upon to meet any sudden demands made upon it by the State, it was wiser to make heavier investments in Reich bills. Thus, the Reichsbank came to look upon the Seehandlung as its chief market for Reich treasury bills, and the Seehandlung in turn depended upon the Reichsbank as a market for its State short-term obligations. In 1914, the Seehandlung held 84.6 million marks of Prussian bills and 284 million marks of Reich treasury bills.[21]

This cooperation between the Reichsbank and the Seehandlung was also present in the issue of securities. The Prussian State was a heavy borrower of long-term capital before the war, and frequently the Seehandlung used its short-term funds to manipulate the money market into a favorable position for the flotation of long-term loans. Since competition in the money and capital markets was disadvantageous to the Reichsbank and to the Seehandlung, the two banks worked together as leaders of bank consortiums in the issue business, and usually Reich loans and Prussian State loans were pooled for one large flotation.

The Seehandlung carried on the largest stock exchange business of any bank in Germany prior to the war, although it was surpassed by the Disconto-Gesellschaft in 1913. It bought and sold stocks for its depositors and current account customers, for any individual who wanted to deal in securities, and for the Prussian ministers of Finance, Agriculture, Forests, Interior, and the like. Thus, in the three branches of its business, it commanded a respect and a strength that made of it at times a source of support but at other times a source of danger to the control position of the Reichsbank. Quantitatively, the support of the Seehandlung was invaluable, but if one considers

21 Guenther Heinicke, *Die Preussische Staatsbank* (*Seehandlung*), (Berlin, 1928), p. 64.

the public nature of the objectives of control by the central bank, the strength of the Seehandlung was a potential danger to the Reichsbank. There was little possibility of Reichsbank control of the money market in opposition to the Seehandlung. Although it is true that in the last few years before 1914 there were only infrequent divergences of opinion and that the Reichsbank gained control of the money market, it must be remembered that that control was with the consent and cooperation of the Seehandlung, and rested precariously upon a recognition of mutual interests. Control policies of a central bank are bound sooner or later to come into conflict with other banking interests. Control for a public purpose is bound to be severely handicapped if there exist one or more banking institutions equal in strength to the controlling bank and independent of quantitative or qualitative pressure.

The place and meaning of the Seehandlung in the German economy in the post-inflation years have completely changed. The inflation meant the collapse of the formerly wealthy German economy, and that collapse affected the State banks probably more disastrously than the private Joint Stock banks. The main pre-war task of caring for State funds was almost wiped out through the devaluation of State securities, through the imperative need for retrenchment in expenditures of all kinds, through the reorganization of the tax system by the government, which centralized tax authority in the hands of the national government, through the giving up of State-owned railways and postoffices to the Reich, and through the rationalization of State-owned industries to make them independent of bank support. The resources of the Seehandlung were thus radically reduced. Then, too, the early post-inflation years were not happy ones for the bank, for its affairs seem to have been badly mismanaged in 1924 and 1925—a mismanagement that led to a public scandal all the more serious because of the bank's former reputation for integrity. The resulting investigation of the affairs of the Seehandlung led to a change in the structure of the bank. The former dictatorial powers of the President of the bank were taken away and the Board of Directors was given complete control through majority vote. The Finance Minister of the Prussian State, while still nominally responsible for the bank, has much less to say than formerly about its management.[22]

In spite of its reduced resources and the public scandal resulting from the investigation into its affairs, the Seehandlung retains a prestige not shared with any other bank in Germany. Its pre-war reputation is responsible, to a large extent, for the influence which it wields today on the Berlin money market. The policy of the bank has become one of active cooperation with the Reichsbank. Its business now resembles that of the large Joint Stock banks and its total balances are usually larger than any one of them. On December 31, 1932 its balance sheet showed a total of 965.4 million reichsmarks. Although still engaged in handling the financial affairs of the Prussian State, this business is secondary to the current account and deposit business for private and industrial clients. It has used its prestige, and the position which it still maintains as a bankers' bank, to support the Reichsbank's efforts to rebuild the private discount market and to stabilize the money market. Since the Reichsbank is restricted in the type of bills it can rediscount, the Seehandlung has performed the important function of broadening the base of the rediscount market and can be depended upon to use its large public deposits in the interests of the total German economy rather than from the narrower viewpoint of the Prussian State. It must be looked upon today as one of the banks which the Reichsbank uses to strengthen its own power in controlling the other banks in the money market.

The post-war change that is noticeable in the Seehandlung is not only that its power has decreased because of the relative unimportance of its State business, or that its business is now more similar to that of the Berlin Great Banks, but also that the attitude of the management (actually the Prussian State)

22 This statement is even more true now than it was up to the year 1933.

has become definitely favorable to central bank control—an attitude which makes of the Seehandlung a bank which willingly assists the Reichsbank in its control objectives. The relationship of the Reichsbank to the Seehandlung still rests upon the voluntary cooperation of the State bank (as opposed to the Reichsbank ownership of the Gold Discount Bank), but that cooperation is more dependable than in the pre-war period and the competitive threat of the Seehandlung has been removed.[23]

The other State banks were forced to go through the same process of retrenchment and reorganization in the post-war period as the Seehandlung, but they were less willing to give up their former position as central banking institutions for their respective States and to submit to Reichsbank control. Thus, we find the Bavarian State bank resenting the control of the Reichsbank over Bavarian public funds, although it recognized that the Reichsbank's aims for the German economy were the same as its own for the State of Bavaria. This bank seems to have taken the position that good central bank management does not rest upon the assembling of all public money in the Reichsbank or the Gold Discount Bank, and that a well-developed money center such as Bavaria should control at least that amount of public money that she needs for her own working capital.

The Bavarian bank and other State banks, in the decade 1924-1933, entered into competition with the Reichsbank for public funds, and had some measure of success in keeping large amounts under their own control. However, the State banks did not offer the same threat to the Reichsbank that they did in the pre-war period, although with the exception of the Seehandlung they continued to entertain hopes of State banking autonomy. Since 1933, these hopes have been shattered under the "rationalization" process of the National Socialist government and by the weakening of the separate German States.

23 See footnote, p. 103.

The Land Banks and Agricultural Banks

There were six land banks and five agricultural banks in Germany in 1913. These banks had been organized by groups of small cities to serve as district central banking institutions for the small local coöperatives which were not affiliated with the two main systems of coöperative banks. The business of these banks was comparatively small and they did not enter into the commercial credit business to any great extent. In the years 1924 to 1933, however, these banks increased in number, opened branches, and competed actively with other banks in the short-term credit field. By 1932, there were fourteen land banks showing total balance sheet figures of 2,407.2 million reichsmarks in 1929 and 2,784.8 million reichsmarks in 1930. Of this amount 929.3 million reichsmarks or 38.6% was invested in short-term loans in 1929 and 867.4 million reichsmarks or 31.1% in 1932.[24] By the end of 1932 there were eight agricultural banks—smaller than the land banks—but they too showed an increasing tendency toward entering into the short-term credit business.

The Note Banks

The four note banks acted as central banking institutions for their respective States and were looked upon locally as the court of last resort in times of monetary stringency. As was pointed out in Chapter II, they were strictly limited as to the type of business they could carry on and the amount of notes that they could issue. Their total balances averaged only 381 million reichsmarks in 1932.[25]

The Coöperative Credit Associations (*Kreditgenossenschaften*)

Coöperative credit is deeply rooted in the German economy and plays a role scarcely understandable to those accustomed

24 Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat*, *op. cit.*, p. 130.

25 *Ibid.*, p. 131. See footnote 7, p. 29.

to the American and English banking systems. The coöperative associations exist primarily for the small business man and the petty farmers. They are built up on the idea of personal short-term credit. The business coöperatives lend for a maximum of three months and the agricultural coöperatives for one year. They lend only to their members, but will receive deposits from non-members. Their operating funds come from capital contributed by their members, reserves built up through their years of operation, deposits (savings and current accounts) and credits with other banks. Their business is comparable to that of the Joint Stock banks and although, of course, the size of each transaction is very small, they have a large number of transactions. Their funds are kept for the most part in liquid investments and through their central banking organizations they play an important role on the Berlin money market. There were 20,884 credit coöperative associations in Germany on January 1, 1924, and 21,373 on January 1, 1932. The total membership in 1932 was 6,628,966.

The purely credit associations belong either to the Schultze-Delitzsche system of business coöperatives or to the Raiffeisen system of agricultural coöperatives. In addition producer and consumer coöperatives exist for all conceivable purposes. The need for a banking organization to further their business led to the development of hundreds of separate small coöperative banks. The Schultze-Delitzsche banks were organized with a central banking institution of their own as early as 1869, when the *Deutsche Genossenchaftsbank* was founded with headquarters in Berlin. In 1872, the Raiffeisen organization followed by establishing the *Deutsche Raiffeisen Bank*. The other coöperatives also began to establish central banking institutions but usually along State or provincial lines. The State of Prussia organized a central banking institution for all coöperative credit banks in Prussia in 1895—The Prussian Coöperative Central Bank, known as the *Preussenkasse*. This bank is now one of the strongest banks operating in the Berlin money market. It keeps all of its assets in short-term investments, loaning freely in the money market except at month-end settlement day when the demands from its local banks force it to borrow in the open market. Early in the twentieth century, the *Deutsche Genossenschaftsbank* was taken over by the *Dresdner Bank,* which established a special department to develop this business. By 1913, the total balance sheets of the main central banking institutions of the coöperative credit associations had grown to 4,816.4 million marks.

In 1924, there were four main central banking institutions for the coöperative credit associations (not including the *Dresdner Bank.*[26] These four institutions had a combined share capital and reserve of 156.5 million gold marks and total deposits of 591.1 million marks when the gold balance sheets were published in 1924. The decade 1924-33 proved a period of steady growth for the coöperative associations. Their control organizations aided in keeping fluid the small short-term credits that were so greatly in demand in the reconstruction years. They also served the important function of binding together business and agricultural intermediate credits. The comparative stability of the coöperative associations and the deep attachment of the German people to the coöperative idea led to a quick rebuilding of capital, reserves, and deposits. The share capital and reserve of the central banking institutions had increased, by 1929, to 233.3 million reichsmarks and deposits to 1,118.3 million. The figures for 1932 show a capital and reserve of 265.4 million reichsmarks and total deposits of 1,013.5 million.[27] The decrease in deposits for 1932 reflects the effects of the banking crisis of July 1931, but the comparatively small amount of the decrease (104.8 million reichsmarks) is also in-

26 These were the *Preussische Zentral Genossenschaftskasse* (*Preussenkasse*), the *Deutschen Genossenschaftsverband,* the *General Verband der Deutschen Raiffeisen Genossenschaften* (*Deutsche Raiffeisenbank A. G.*), and the *Reichsverband der Deutschen landwirtschaftliche Genossenschaften. Statistisches Jahrbuch für das Deutsche Reich,* 1928.

27 *Ibid.,* 1933. There were at this time only three central banks; the *Raiffeisen Bank A. G.* had been taken over in 1928 by the *Preussenkasse.* These figures do not include the coöperative business of the *Dresdner Bank.*

dicative of the confidence of the people in the coöperative banks. The other banks suffered much more. The competition among the Joint Stock banks, the savings banks and the coöperative banks became even more severe during this period than before the war and in spite of the competitive agreement of 1929 (*Wettbewerbsabkommen*) continues to be very strong. There is, no doubt, an overlapping of function, particularly since the savings banks have begun actively to develop the personal credit business.

The government has taken several steps to reduce the amount of overlapping. In the first place, in October 1932, the *Preussenkasse* was made a national bank rather than a State bank to operate as the central banking institution for all coöperative credit associations in the Reich; its name was changed to the *Deutschenkasse*. The *Dresdner Bank* was relieved of its work in the coöperative credit field and the capital of the new *Deutschenkasse* was increased by forty million reichsmarks contributed by the government (the government already owned one-half of the share capital of the old *Preussenkasse*). In the second place, a new bank was founded in January 1933, with capital supplied by the Gold Discount Bank, the *Bank für Industrie Obligationen,* the *Deutschenkasse,* the *Dresdner Bank,* and the individual coöperative credit banks (the latter contributed only a very small amount). The task of the new "*Mobilisierungs Kasse*" is to make more liquid the credits of the business coöperatives throughout the Reich.

Thus, in the field of coöperative credit just as with the State banks, the savings banks, and the Joint Stock banks, structural changes of great importance were taking place from 1924 to 1933. The coöperatives became more centralized so that their pooled resources in their central banking institutions played a leading part in the money market of Berlin. Although these changes were taking place in the early years of the decade, they were much more marked from 1931 to 1933.

The credit coöperative associations, under crisis pressure and the new rationalization of the National Socialists, gradually lost their basic principle of self-help. In 1933, their central banking institutions were largely owned by the government and their separate banks were still heavily in debt to their central institution for support credits given to them in the 1931 crisis. Their history since 1933 is bound up with the radical reorganization of the agricultural economy in Germany and they seem now to have lost their original character.

The Specialized Banks

The specialized banks in Germany numbered seventy-three at the end of 1932, sixty-five of them privately owned and eight publicly owned.[28] The idea of specialized banks is not new in Germany, for there were twenty-nine of these institutions in 1913, all privately owned. These banks were, however, small and, although serving a particular trade or industry, their significance to the credit life of the nation was minor. In the post-war period, the specialized banks began to develop a new meaning. The private banks increased in number but it was the growth of large, national, publicly-owned specialized banks that brought this group into national prominence. When one speaks of specialized banks of post-stabilization Germany, one refers, generally, only to the publicly-owned banks. Table XVIII shows the total balance sheet figures for all of the specialized banks, public and private, and, for the purpose of comparison, the total figures with the amount of the balance sheets of the Gold Discount Bank and the *Deutsche Verkehrskreditbank* subtracted. The table shows also the amount of short-term deposits held by these banks and their acceptance credits.

28 There is no agreement in German bank statistics as to the exact number of specialized banks in Germany. The *Statistisches Jahrbuch, Die Reichsbank, op. cit., Der Bankkredit, op. cit.* and the reports of the *Central Verband des Deutschen Bank und Bankiergewerbes* all give different figures. The figures used here are those of the *Central Verband* as reported by Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat, op. cit.*, p. 133.

TABLE XVIII. ASSETS OF THE SPECIALIZED BANKS [a]
1913, 1928, 1930, 1931
(In millions of reichsmarks)

Year end	Total balance sheets	1 minus Gold Discount Bank and the Verkehrskreditbank	Total short deposits and acceptances	3 minus Gold Discount Bank and the Verkehrskreditbank
	1	2	3	4
1913	544.1	544.1	139.1	139.1
1928	2,165.2	1,494 2	1,523.0	1,065.7
1930	3,425.0	2,382 0	2,666 0	1,921 0
1931	2,866.0	1,586.0	2,155.0	1,205.0

[a] Walb, *Uebersetzung und Konkurrenz im Deutschen Kreditapparat, op. cit.*, p. 133.

The table brings out the difference between the pre-war period and the post-war period. It also shows clearly the significance of the publicly-owned banks since only two of these, the Gold Discount Bank and the *Verkehrskreditbank,* accounted for 44.66% of the total balance sheets on December 31, 1931.

A complete analysis of the specialized banks in Germany would take us too far afield since each exists for its own purpose and each differs radically from the other. Of the eight publicly-owned banks, four are of sufficient importance to the credit life of the nation, and to the Reichsbank in particular, to receive further consideration. The Gold Discount Bank, one of these four, has already been discussed. It must be classed as one of the most important specialized banks. Its classification as a public bank is correct, although, as was pointed out in Chapter II, it is entirely owned by the Reichsbank which is itself privately owned and operated; in spite of ownership, however, the Reichsbank and its daughter institution can be looked upon only as public banks. A short summary of the three most important specialized banks will serve to illustrate the particular significance of this group.

The *Deutsche Verkehrskreditbank A. G.* was founded in 1923 for the purpose of furthering the business of handling freight on the German railroads. It has established 2,400 branches throughout the Reich and has come to be the bank that handles all of the financial transactions for the railroads. The majority of its shares is owned by the German Railway Company (*Deutschen Reichsbahn Gesellschaft*). It has control over large amounts of capital and its investments in the money market are of tremendous importance. Through an agreement with the Reichsbank, these investments have been limited to prime bankers' bills guaranteed by the Reichsbank, the Gold Discount Bank or the largest Joint Stock banks, and to Reich treasury bills. On June 30, 1931, its balance sheet showed assets and liabilities of 467 million reichsmarks plus a share capital of four million (increased to twenty million reichsmarks in October 1931) and a reserve of 1.4 million reichsmarks.[29]

The *Deutsche Bau- und Boden Bank* was founded in 1923 for the purpose of granting credits to the building trades. Its shares are owned for the most part by the government although some are in the possession of large landowners and public and private banks. The bank is operated by the government. It grants credits to coöperative building societies, to private contractors, and to private individuals. The bank carries on all types of banking business, particularly a deposit and short-term lending business. In 1928, it borrowed five and one-quarter million dollars in the United States on a six and one-half percent bond issue guaranteed by building mortgages. On December 31, 1931, its balance sheet showed assets and liabilities of 213 million reichsmarks with a share capital of 34.3 million reichsmarks and a reserve of five million.[30]

The *Bank für deutsche Industrieobligationen* came into existence in 1924 as a result of the Dawes Plan. Its special purpose was to act as the trustee of the Dawes loan creditors in

29 Palyi and Quittner, *Handwörterbuch des Bankwesens, op. cit.*, p. 415.
30 *Ibid.*

the collection of funds from the industries whose revenues were pledged for interest payments on the loans. The interest on this loan amounted to a total of five billion gold marks, or an annual payment of 250 million reichsmarks. Through its connections with industry, the bank proved to have a tremendous influence on the rebuilding of the German economy. After the Young Plan came into being, the industrial guarantees were removed from the German loans and the bank was then reorganized as an industrial bank which granted credits to private industry and to agricultural undertakings. This bank might be classed either as a specialized bank (as it was until 1930) or as a support institution; it had some of the characteristics of the latter group even in the earlier years and these became more pronounced after 1930. It is managed by a Board of Directors of thirty-three members, five of whom are members of the government and one, at least, a member of the Board of Directors of the Reichsbank. The bank functions primarily as a source of small or moderately small loans and has the right to issue interest bearing bonds up to six times the amount of its share capital. It engages in all types of banking business and carried a business on its balance sheet of March 31, 1932, of 150 million reichsmarks plus a share capital of fifty million and a reserve of sixty-five million.[31]

The growth of public credit institutions and their increasing importance in the credit life of the nation is one of the basic structural changes of the post-stabilization decade. While the specialized banks show the increasing tendency of the government to enter into banking, they are, on the whole, of less significance than the support institutions.

The Support Institutions

The support institutions (*Hilfsinstitute*) belong wholly to the period under discussion and are all owned and operated by the German government. They are organized as bankers' banks and they were intended, for the most part, to unify and centralize the short-term credit business of all banks. We shall attempt to outline only briefly the organization and functions of the main banks belonging to this group.

The *Deutsche Rentenbank* was created in 1923 to stabilize the currency after the inflation. Its capital was 3,200 million rentenmarks, raised by a levy upon the whole German nation. It had, during the stabilization process, the sole right of note issue. When the Reichsbank was reorganized in 1924, it took over from the Rentenbank that portion of its note issue which was guaranteed by industry and trade (1,200 million rentenmarks). The remaining two billion rentenmarks guaranteed by agriculture, forests, and the government were converted into a long-term indebtedness bearing five percent interest. The debt was to be paid off at the rate of 100 million marks annually. The task of withdrawing the Rentenbank notes from circulation and the gradual substitution of reichsmarks was given to the Reichsbank. The indebtedness of the government to the Rentenbank was to be paid back by sixty million reichsmarks annually set aside out of the ordinary budget. Also, the government was to pay a portion of the agricultural indebtedness—another sixty million reichsmarks annually. To carry out this purpose the government guaranteed to set aside its annual share of the profits of the Reichsbank.[32] It was thought that the Rentenbank notes could be withdrawn from circulation within a period of three years, but the depressed state of agriculture and the budgetary difficulties of the Reich made this impossible. On December 1, 1930, the length of life of the Rentenbank was extended for twelve years; the notes were to be completely withdrawn from circulation by 1942.[33]

The *Deutsche Rentenbankkreditanstalt* was organized as the central banking institution for all of the agricultural credit corporations in Germany. Its original purpose was to liquidate the indebtedness of agriculture arising out of

32 See footnote 12, p. 32.

33 *Ibid.*

the Rentenbank's long-term bond issues, but it has developed into one of the most important banking institutions in the country. It carries on [large long-term] borrowing and lending operations, carries a personal deposit and loan business which operates only through the existing credit institutions, and it borrowed heavily in foreign markets. Its liquid balances are at times very large and these are employed in the purchase of short-term bills in the money market. The bank is managed by a Board of Directors of twenty-four members elected by the one hundred and ten largest agricultural credit societies, but the Board is directly responsible to the German government. Its capital is 170 million reichsmarks but it can be increased to 500 million through the issue and sale of interest-bearing agricultural mortgage bonds. The annual increase in capitalization is limited to twenty-five million reichsmarks. This bank is one of the strongest support institutions to the Reichsbank.

Four other government banks were organized in 1931 and 1932 and performed important functions in the transition from the older competitive system to a highly integrated and controlled banking system.

The *Akzept und Garantiebank* was founded in July 1931 for the special purpose of guaranteeing bank loans. Some such bank was necessary after the banking crisis of 1931, when the German government reopened the banks after the bank holiday with a special government guarantee of all bank deposits. Support credits to the banks were granted by the government through the *Akzept Bank* to the amount of one and one-half billion reichsmarks. The *Akzept Bank* has a capitalization of 200 million reichsmarks, eighty million of which were contributed directly by the Reich and sixty-six million from government-owned banking institutions. It is primarily a bankers' bank and is under the control of the Reichsbank.

The *Diskont Kompagnie A. G.* was founded on December 5, 1931 to broaden the rediscount market, which had become paralyzed under the continued banking difficulties, and to relieve the Reichsbank from the necessity of bearing the entire rediscount burden. Seventy percent of its share capital is publicly owned—fifty percent of it by the Gold Discount Bank—which makes the *Diskont Kompagnie A. G.* a subsidiary to the Reichsbank. The bank expanded its functions rapidly in 1932 and 1933 and was used by the National Socialist government as a discount center for the work-creation bills brought into existence to pay for public works, employment schemes and the like.

The *Deutschen Finanzierungsinstitut,* known as the Defi bank, was organized in December 1932. Its share capital of thirty million reichsmarks is owned by the Gold Discount Bank, the *Akzept Bank,* the *Bank für Industrieobligationen,* and private bankers. Its purpose is to serve as a rediscount center for large banks, to keep short-term capital fluid throughout the nation and to direct capital loaned by the government into profitable undertakings.

The *Tilgungskasse für Gewerbliche Kredite,* known as the Tilka bank, was founded at the same time to liquidate the support credits granted by the government to the banks in the banking crisis. Its capital of thirty million reichsmarks was supplied by the Gold Discount Bank. The bank was chartered for twenty-five years, when it is estimated the amortization plan put into effect will have liquidated the total bank indebtedness to the government.

Summary

Three changes of importance characterize the development of German banking in the decade 1924-33. These are—1) the entrance of all types of banks into the commercial credit field and the resulting expansion of short-term credit; 2) the rapid integration and centralization which took place in each of the bank groups; and 3) the growth of public credit institutions. All of these are structural changes of deep-rooted significance in the question of central bank control.

The relationship of the bank groups to the total amount of short-term loans granted by the German banks is shown in the following table:

TABLE XIX. TOTAL SHORT-TERM LOANS OF THE GERMAN BANKS [a]
1925–1932

Year end	Total domestic short-term loans (in million Rm.)	Percentage of total supplied by		
		Private [b] credit banks	Coöperatives	Public [c] credit banks
1913	19,608	70.8	20.5	8.7
1925	13,006	56.8	11.5	31.7
1929	27,128	60.2	14.6	25 2
1930	27,626	57.3	15.7	27.0
1931	22,275	50.7	18.2	31.1
1932	20,429	49.8	17.7	32.5

[a] Compiled from statistics in *Untersuchung des Bankwesens*, Part II, *op. cit.*, pp. 14-25. Short-term loans include bills, report and lombard loans, advances against goods, loans to banks, and unsecured customer loans.

[b] Exclusive of private bankers.

[c] Public credit institutions include savings banks, land banks, municipal banks, and the Girozentralen.

The table brings out in detail what has been said above. The private credit banks declined in relative importance, while the public credit banks increased; the coöperatives lost some of their pre-war influence in the short-term money market but regained, to some extent, the position lost.

The expansion in bank credit is startling. The short-term loans of the German banks were almost eight billion reichsmarks greater on December 31, 1930 than they were on December 31, 1913. It must be remembered that the capital and surplus of the German banks had been decreased through the inflation and subsequent stabilization and, although there was some rebuilding of the capital structure from 1924 to 1930, the old pre-war position had never been regained. These facts are shown in the following table:

TABLE XX. CAPITAL AND RESERVE OF THE THREE MAIN BANK GROUPS
(December 31, 1913; and 1925 to 1932) [a]
(In millions of reichsmarks)

Bank group	1913	1925	1929	1930	1931	1932
Private credit banks [b]	4,441	1,370	1,783	1,736	1,290	1,166
Public credit institutions [c]	1,196	346	739	833	943	1,040
Cooperatives	615	296	600	665	677	642
Total	6,252	2,012	3,122	3,234	2,910	2,848

[a] *Untersuchung des Bankwesens,* Part II, *op. cit.,* p. 121-122.

[b] Exclusive of private bankers.

[c] Exclusive of the Gold Discount Bank, the *Verkehrskreditbank* but including the *Deutsche Girozentrale.*

In spite of the absolute increase of 1,222 million reichsmarks in the capital and reserve of these banks from 1925 through 1930, the amount in 1930 was only 51.72% of the 1913 figure and by 1932 it had dropped to 45.55%.

The position of the German banks becomes clearer, however, if one includes in this survey the short-term borrowing of the banks in foreign markets. The second Basle committee estimated that the total amount of foreign short-term funds on deposit with German bankers amounted to eight billion reichsmarks on December 31, 1930.[34] Although this figure is only an estimate and cannot be taken absolutely at face value, there is a striking resemblance between the increase in the short-term loans of the German banks (eight billion reichsmarks) and their short-term foreign borrowings. The banks were not merely lending freely on a weakened capital structure, but they were able to continue lending only because foreign banks were willing to hold large deposits in Germany. The real expansion in

34 League of Nations, *World Economic Survey,* 1931/1932, p. 80.

short-term loans was borne by the foreign depositors of the German banks. The German banks, in permitting themselves to become involved, were trustingly placing their continued existence in the hands of foreign depositors. The strength of any banking system rests upon confidence. In Germany, however, this essential confidence was foreign rather than domestic. The results of the situation the world knows well. The 1931 crisis brought the German banking system very close to disaster.[35]

The expansion of short-term loans by the German banks was offset to some extent by the decrease, both absolute and relative, in their long-term investments. These figures are shown in Table XXI:

TABLE XXI. LONG-TERM INVESTMENTS OF THE THREE MAIN BANK GROUPS [a]

December 31, 1913; and 1925 to 1932

(In millions of reichsmarks)

Bank group	1913	1925	1929	1930	1931	1932
Private credit banks	4,443	716	2,194	2,312	2,728	2,837
Public credit institutions ...	21,595	1,114	11,331	13,236	13,815	13,547
Coöperatives ...	386	45	218	276	333	277
Total	26,424	1,875	13,743	15,824	16,873	16,661

[a] *Untersuchung des Bankwesens*, Part II, *op. cit.*, pp. 38-49.

The long-term investments of the German banks never regained their pre-war importance. A great deal of the expansion of short-term bank loans was accomplished at the expense of the decrease in long-term; or, to put it another way, the long-term needs of the German economy were carried by the banks in the form of short-term loans. This was a further source of weakness to the German banking system as a whole.

35 See below, Chapter VI.

The increased importance of the short-term bank loans and the entrance of all banks into commercial banking broadened the power of the Reichsbank over the banking system. In so far as central bank control policies press directly upon Reichsbank Giro deposits, the discount market, and the cost of short-term loans, and the larger the number of banks influenced by these policies, directly or indirectly, the greater the effect upon the total economy. This will become more obvious as we take up the integrations of the Reichsbank with the banking system in the short-term money market in the following chapter.

One is frequently told in Germany that there is not one central bank, there are many central banks. This statement refers, of course, to the large number of central banking institutions that exist for the purpose of consolidating the activities of some particular group of banks. It does not refer to a multiplicity of banks existing for the purpose of controlling the entire banking system for some public purpose. The private Joint Stock banks were united into eight large systems (five in 1933) with the Berlin Great Banks acting as central banking institutions for their branches and affiliates. The savings banks and the land banks depend upon the *Deutsche Girozentrale* for clearing, rediscount credit, and as a depository for funds. The business of the coöperatives is now largely concentrated in the *Deutschenkasse* (formerly the *Preussenkasse*). The Seehandlung is still a bankers' bank used by other banks throughout Germany for rediscount, for lombard loans, and as a correspondent bank in the money center. These banks are all located in Berlin. In addition, there are the four note banks which are central banking institutions for their respective States and the larger State banks which also have some of the functions of central banks. These latter are required however, to follow the Reichsbank discount and lombard loan policy, and to this extent, they are supplementary to the Reichsbank; in so far as they serve as rediscount centers and put notes into circulation, they broaden rather than hamper the task of the Reichsbank.

Any discussion of the Reichsbank as the central bank of Germany with the power of controlling the credit life of the nation must take into consideration this centralization of banking in large groups each of which is headed by a central banking institution of its own. On the whole, the high degree of centralization and integration of the German banking system works for more effective Reichsbank control. It is the relationship of the Reichsbank to these central institutions that becomes important.

The growth of public credit institutions in the decade 1924-33 has been one of the most important of all changes taking place in the organization of German banking. From the standpoint of the Reichsbank, the government-owned specialized and support institutions are actually tools of the Bank. The relationship of the Gold Discount Bank to the Reichsbank has been discussed in Chapter II. The other public banks, such as the *Rentenbankkreditanstalt* and the *Verkehrskreditbank,* were used by the Reichsbank to support its efforts to gain control over public funds from 1924 to 1927, to rebuild the capital market and the private discount market, and to grant credits to agriculture. Both quantitatively and qualitatively the Reichsbank has been strengthened by the existence of these public banks; quantitatively, because the resources of these institutions, used under Reichsbank direction, added to the weight of the central bank in the money market; qualitatively, because through these institutions the Reichsbank was enabled to put into operation many measures that would have been impossible under its own charter.

After the banking crisis of 1931, the Reichsbank became practically dictator over the credit life of the nation. The increased importance of the Reichsbank came not only through its position as the court of last resort for foreign exchange, money, and credit, but also through actual ownership participation in the control of the Joint Stock banks and the central banking institutions, as well as through the direct or indirect control of the new support institutions. Although the position of the Reichsbank was very much stronger after 1931 and amounted to monopoly control of the entire banking system, the shift from private to public credit was taking place throughout the earlier years of the decade. The total amount of short and long-term loans granted by the public banks, the savings banks and the Joint Stock banks on October 30, 1930 was: [36]

Public credit institutions	3,161.1	million	reichsmarks
Savings banks (public)	4,766.6	"	"
Total	7,927.7	"	"
Private stock banks [37]	4,918.9	"	"
Total	12,846.6	"	"

Thus, 61.7% of the total loans granted came from publicly-owned banks. Of this amount, about 40% was put into circulation by public institutions directly subject to Reichsbank control and acting under the advice of the Reichsbank.

The ability of a central bank to carry out its credit policies and to make them effective will depend very largely (as far as the domestic economy is concerned) upon the degree of integration and cooperation found in the banking system of which it is a part. As one studies the changes taking place in German banking in these ten years he is impressed by these structural developments, all of which worked toward strengthening the control position of the Reichsbank.

36 Palyi and Quittner, *Handwörterbuch des Bankwesens, op. cit.*, p. 414.

37 Exclusive of private bankers.

CHAPTER IV

THE MONEY MARKET

We have been concerned so far with a structural analysis of the Reichsbank and of the commercial banks. Some further understanding is required of the business habits and techniques that have been built up in Germany to facilitate the use of funds.

There is no agreement in the use of the term *money market*. In the broad sense, the term covers a complex group of ideas embodying the interlocking habits, customs, institutions, and techniques of the whole credit process. In the narrower sense, a money market means a balancing place for marginal funds. In any case, the term money market carries with it the implication that institutional integration has reached a point where coherence and form are found in the credit system.

A clear understanding of the credit process as it operates in Germany requires the broader interpretation. Mixed banking leads to mixed usage. The German banks operating as brokers, issuers of long-term securities, and suppliers of short-term credit have developed a type of credit business in which no very sharp lines of distinction can be drawn.

Money Market Institutions and Their Techniques

In Germany the development of a well-defined money center came comparatively late. At the beginning of the twentieth century, organization had gone so far as to produce three competing cities: Frankfurt-am-Main, Hamburg, and Berlin. By 1914 the dominance of Berlin as the money market of Germany was unquestioned, although Frankfurt-am-Main retained considerable importance. The prestige of the city of Berlin rested upon the fact that it was the capital of the most wealthy of the federal States—Prussia—and was also the capital of the German nation. It had, therefore, an advantage in the use of large amounts of public funds which created in Berlin a natural reservoir of capital which could be tapped by all parts of the country. Competition among the banks, which resulted in the centralization of banking power in Berlin, gave institutional weight to the credit policies of the Berlin Great Banks and made it possible for them to impress their credit forms and techniques on the entire nation. Furthermore, the Reichsbank, as the clearing center for the whole credit economy with its head office in Berlin, placed its final stamp of approval on that city as the money market of Germany.

The necessity of quick rebuilding of the credit structure after the collapse caused by the inflation emphasized clearly the importance of a money center. Berlin emerges in the period 1924-33 as the money market of Germany with a power in the credit life of the nation comparable to that exerted by London, New York and Paris in their respective countries.

The institutions of the Berlin money market are the exchanges, the banks, and a small number of independent brokers. There are three exchanges operating in Berlin; the stock exchange, where money, foreign exchange, bank acceptances, trade bills, and securities are handled; the produce exchange for the grains, coffee, rubber and the like; and the metal exchange, covering transactions in all metals other than gold or silver. It is only the first of these—the stock exchange, or more properly the bourse—that we shall consider here in detail. The banks include all of those institutions mentioned in Chapter III, and the Reichsbank. Although, in function, banks and the bourse must be distinguished from each other, there is in Germany such an interrelationship between them that any analysis of the operation of the one without the other is impossible. Aside from the few independent brokers who operate on the stock exchange, the entire money business of Germany is concentrated in the commercial banks.

The separation of the institutions of the Berlin money market into the bourse, the banks, and the independent brokers is convenient for the purpose of a descriptive analysis of the techniques developed in Germany to facilitate the flow of funds. It must not be supposed, however, that there is the same degree of actual separation as is found in America and in England. The distinctive characteristic of German banking is that it is "mixed" banking. The effects of this mixture on the money life of Germany are brought out clearly in a study of the habits and customs of the Berlin money market.

A complete analysis of bourse trading will bring out: 1) the bank credit interconnections with the bourse, 2) the interbank connections on the bourse, and 3) the relationship of banks and bourse to the Reichsbank. The technique developed by the commercial banks to balance cash and credit among themselves form the general structure of the money market. The place where interbank balancing takes place is the bourse.

The Berlin bourse is a private trading body operating under the supervision of the government. Government supervision covers such things as business aims, permission to operate, rules of honor under which transactions are carried on, and the listing of goods and securities. Contrary to the organization of the stock exchange in London and New York, any adult person who is himself a business man or who represents a business partnership or corporation may theoretically belong to the bourse. Trading, however, requires recognized membership which can be acquired by the formal presentation of an application to the governing body signed by guarantors of outstanding business reputation and by the payment of 5,000 reichsmarks membership fee. The most important operators on the Berlin bourse are the banks, which enter into trading both on their own account and as brokers for their customers. The large Berlin banks have had at times as many as forty or fifty memberships each in the Berlin stock exchange. This combination of brokerage function and banking function is one of the characteristics of German banking.

In addition to the banks, there are a few powerful independent brokers who legally do business only on their own account and with their own capital but who enter into trading for the purpose of re-sale. Since 1924, some business firms have operated independently on the bourse, entering into the short-term market either as borrowers or lenders. These firms use their surplus funds directly in short-term investments or borrow in their own name without bank guarantee. They have been able, in recent years, to carry out the flotation of new securities without banking support. This development of independent financing by industry is one of the most important money market changes that took place after 1924.

The business of the bourse can be grouped under three main divisions: 1) the securities business, 2) the discount business, and 3) the foreign exchange business.

The Securities Business

The securities dealt in include:

1) All types of *bonds of public bodies*—government loans, State, municipal and provincial loans, both domestic and foreign;

2) *Real estate bonds* of all sorts. In Germany there are many types of such securities, for the business of borrowing with land guarantees has been carried to a fine point both for agricultural land and for city improved property. The land banks and the coöperative agricultural associations issue bonds in their own name backed by the pooled mortgages on farms (including the land, buildings, and stock); the mortgage bond companies issue bonds backed by pooled mortgages on city property; some private real estate firms sell mortgages on specific pieces of real estate; and the States and cities frequently borrow on mortgage bonds.

3) *Shares* of industrial firms, banks, insurance companies, and the like. These are almost wholly common stock; preferred stock in its many varieties, familiar to the American investor, is practically unknown in Germany.

4) *Industrial bonds* play a very small part in the German market for, before the war, industrial firms secured long-term capital only through the issuing of stock. Since 1924, however, a few industrial bonds have appeared, probably to tempt foreign investors. Two types of industrial bonds familiar to the Ameri-

can market—convertible bonds and optional bonds—have been adopted by a few large German industrial firms and, in the years 1925 to 1929, became increasingly familiar (although never popular) to German investors.

Trading in securities on the Berlin bourse may be either for cash or on contract (*Termingeschäfte*). All securities may be bought and sold for cash but the forward security (contract) deals are limited both as to the securities that may be traded and as to the firms permitted to handle this type of business. The amount of short-term funds that the banks are willing to lend determines the extent of the cash securities turnover. The cash purchase of securities is handled by borrowing on what is known as the bourse lombard loan. A lombard loan is the broad term used for any type of loan backed by movable property; the bourse lombard is the loan backed by specific kinds of movables—securities and bills of exchange. Bourse lombard loans take two forms: 1) *daily money*—which is money loaned for twenty-four hours; and 2) *monthly money*—which runs from the end of one month to the end of the next (*Ultimogeld*). The banks buy and sell securities for cash on the bourse, both on their own account and as commission agents for their customers. When they buy and sell securities for their clients, a large portion of the business is financed by bank credit. A customer in good standing who desires to speculate in securities, buys and sells through his bank; he is required to maintain a cash deposit, the amount of which is determined by many factors—the credit standing of the client, the market value of the securities dealt in, and the general ease or tightness of the money market. The remainder of the purchase price of the securities is borne by the bank, which carries such a loan on its books as a secured current account item. The bank has the legal right to call for complete settlement of the stock account at any time (as has the client) but, as a matter of custom, in normal periods there is a general accounting once a month. The interest rate paid by the client on each buying order is the bourse rate for monthly money plus the brokerage charges of the bank.

Banks may carry their clients with their own funds or they may borrow daily money or monthly money in the open market or from other banks, again using securities as the basis of borrowing. Such pyramiding of credit, using the securities purchased as the basis for the bank loan or for the interbank bourse lombard loan, is made possible in Germany through a highly-developed stock clearing system. As far back as 1896, a "deposit law" was passed by the national government making it possible for banks to use all collateral in their possession as a basis for bank credit. Such collateral might be those securities: 1) owned completely by the bank, 2) deposited with the bank for safe-keeping and management, 3) pledged to the bank as a security for a loan, or 4) purchased by the bank on commission for customers.[1] A large portion of these securities is now pooled by the banks and kept on deposit with the *Berliner-Kassenverein*—the clearing house of the Berlin banks which balances all checks, assignments, and security demands of all of the banks operating on the Berlin bourse. Such security deposits with the *Kassenverein* are drawn upon, pledged, or transferred with the same ease as a cash deposit with a central bank. A white check is made out for direct withdrawal of securities, a red check for the transfer of securities from one security-Giro account to another, and a green check for the pledging of securities temporarily for a loan. The banker requiring a cash loan from another bank presents to the lending bank a green slip showing stock on deposit with the *Kassenverein* with a market value of 66⅔% to 90% of the total amount of the loan; the lending bank grants the loan in a check drawn upon either the *Kassenverein* or the Reichsbank. Since banks operate both as borrowers and as lenders on the exchanges, a large proportion of payments and collections is cancelled out in the clearing process, thus freeing both cash and securities for further loans. This use of security deposits with the *Kassenverein* has the same effect upon the total volume of stock market loans as

1 Willi Prion, *Die Effektenbörse und ihre Geschäfte* (Berlin, 1930), *passim*.

the clearing and collection of checks has upon the use of bank deposits.

The forward security or contango transactions (*Terminge-schäfte*) on the Berlin bourse are speculative deals governed by bull (*Haussier*) and bear (*Baissier*) operations. The basis of the business is the contract between the buyer and seller, under which the buyer agrees to take a certain number of shares of stock at a certain price and time, and the seller guarantees delivery of the stock at that price and time. The curious features of these contracts in Germany is that the time of settlement of the contract is fixed by bourse rule and is always the same—contracts for future purchase and sale must be settled either at the middle of a month (*Mediogeschäfte*) or at the end of a month (*Ultimogeschäfte*); the majority are settled at the end of the month. Only shares of companies capitalized at twenty million reichsmarks and over may be dealt in in *Termingeschäfte* and then only with the consent of the government and of the company concerned.

This fixing of all bourse contracts for end-of-the-month settlement is one of the features of the Berlin money market which affects the relationship of the banks with the central bank. Although, of course, there are other fixed relationships in the German economy which increase the month-end demand for cash, that month-end demand is increased by the bourse custom of settling forward security contracts at this particular time. The banks tend to depend upon the central bank for cash at the end of each month, increasing their bill discounts or their lombard loans at the Reichsbank in order to meet the cash demands made upon them. The policy of the Reichsbank is therefore influenced to some extent by the amount of speculative stock transactions carried by the banks.

The speculator depends upon his ability to borrow either money or shares from the banks on settlement day to fulfill his contracts. This type of lending is known as the report business and is especially satisfactory to German bankers because it requires a comparatively small amount of capital, brings in a higher rate of return than lombard loans or the discount business, and, for the bank, is comparatively safe. The report business of the German banks brings out one of the "mixed" features of German banking. It is essentially a combination of the role of the American banks on the stock exchange and the role of the stock brokerage firms. The individual who has contracts to receive shares on settlement day, and must therefore have cash to pay for them, sells to the bank his right to the shares and immediately buys them back from the bank for delivery at the next month-end settlement day. The report rate on the transaction, and the bank's profit, is the difference between the price it pays for the shares and the price at which it contracts to resell them at the end of the month. The speculator who contracts to deliver shares on settlement day and has not the shares in his possession buys shares from the bank and immediately agrees to resell them at the end of the next month. Here again, the bank's profit is the difference between its selling price for the shares and its rebuying price (the deport rate). Money borrowed in transactions of this sort is known as "fixed" money (*gefixed*). The general attitude toward the lender of "fixed" money is shown in sayings popular on the bourse such as:

> Der "Fixer" ist bei Gott beliebt
> Weil er nicht hat und dennoch gibt,

or more morally:

> Der "Fixer" ist bei Gott verachtet
> Weil er nach fremden Gelder trachtet.[2]

During the war and the inflation period the report business was stopped on the Berlin bourse and all transactions were carried on on a cash basis. In 1924, with the return of stable cur-

2 By Jove, we like the fixer so
Who has not, but procures the dough;
And do, by Jove, despise him yet
For our deposits he aims to get.
(Very free translation)

rency and in an effort to develop every possible means of facilitating the flow of money and credit, the forward exchange business was reëstablished under new rules. At this time was founded a central banking institution,[3] membership in which was required for all bankers entering into speculative transactions either on their own account or on behalf of their customers. *The Liquidationskasse* (*Liquidationsverein für Zeitgeschäfte an der Berliner Fondsboerse, A. G.*) has two main objectives: 1) to develop facilitating techniques to broaden and simplify the forward security transaction, and 2) to guarantee the liability of the members. A membership fee of 3,000 reichsmarks is required and, in addition, each operator must keep on deposit with the bank an amount of money, the amount depending upon the money turnover of this type of business. These deposits range from 20,000 to 250,000 reichsmarks. Furthermore, each day's forward security business must be covered by at least 5% of the total amount contracted on that day—such deposits to be either in cash or in securities (10% for banks with the minimum deposit). The governing board of the bank has the right to call upon its members for additional cover in any period of general decline in prices. There are at the present time about 500 banks and brokers belonging to the *Liquidationskasse.*[4]

A client carrying on speculative stock transactions through his bank must notify the bank three days before settlement day whether he will take over the stock purchased for him or whether he wishes the time prolonged. If he desires time his bank "reports" the stock, charging him the current rate for report money. In this case, the bank at the time the order was given, had either purchased the stock for cash, granting the client a regular lombard loan which is now turned into a report loan, or it had made a contract to take stock (on behalf of the client) on settlement day. In the latter case, a cash outlay is re-

3 This bank is one of the important "support institutions" of the postwar period.

4 Prion, *Die Effektenbörse, op. cit.*, pp. 51-55.

quired; the bank may supply it itself, or it may take report money from a lending bank on the bourse.

Interbank borrowing of report money on the bourse requires the support of a bank not connected with the particular contract—*i.e.,* bank X sells stock to bank Y; bank Y borrows report money from bank Z to pay bank X. The bank's transaction with its client is carried on its books as a part of its current account business and will appear on the balance sheet under that item. Report money loaned by banks to banks and brokers on the bourse appears on the balance sheet under the heading Reports and Lombards. Because of the nature of the banking business in Germany, which combines the brokerage function with all other types of banking, it is extremely difficult to gain from the bank balance sheets any adequate picture of the relative amount of bank credit used to support the securities business of the bourse. In the last analysis, the loans appearing on the balance sheets under Reports and Lombards represent only the interbank borrowing and lending on stock exchange transactions. A large proportion of this business is carried by the banks themselves on behalf of their clients but is lost to analysis because of the habit of lumping all bank-client relationships under the heading of current accounts.

Although it is impossible to determine exactly the amount of bank participation in the securities business either as brokers or as direct purchasers, a study of the report and lombard loans of the Berlin Great Banks, of the securities held in their own name, and of the secured customers' loans in their current accounts will throw some light on the problem. The following table shows the report and lombard loans of the Berlin Great Banks from 1924 to 1932.

These figures are taken from the December 31 balance sheets of the banks, and while there is undoubtedly a certain amount of "window dressing" for the year-end report, they are indicative of the general relationship of the stock exchange loan to the total business of the bank. The figures show the gradual rebuilding of the securities turnover after the collapse

TABLE XXII. REPORT AND LOMBARD LOANS OF THE BERLIN GREAT BANKS[a]
1924 to 1932
(In millions of reichsmarks)

Year end	Reports and lombards	% of total balance sheet
1913	769.7	10.2
1924	38.2	0.9
1925	121 9	2.1
1926	762.5	10.3
1927	603.3	6.3
1928	745.2	6 2
1929	562.0	4 1
1930	353.2	2.7
1931[b]	128.5	1.4
1932	31.8	1.4

[a] Compiled from statistics in *Die Bank,* Volumes XVII to XXVII, 1924-1934, inclusive. Figures for 1913-1926 include the *Deutsche Bank, Disconto Gesellschaft, Dresdner Bank, Darmstädter und National, Commerz und Privat Bank* and the *Berliner Handels Gesellschaft.* Figures from 1927-1932 add to these the *Reichs Kredit Gesellschaft*; in 1929 the figures of the *Deutsche Bank* and the *Disconto Gesellschaft* are merged, and after 1931 the *Darmstädter Bank* was merged with the *Dresdner Bank.*

[b] The Berlin bourse was closed from July 13, 1931 to March 1932.

of 1923 up to a high point in 1926, when the percentage relationship reached the pre-war level. The decline in 1927 is due to the influence of the Reichsbank in May 1927 when speculation began to get out of hand because of the flow of foreign funds. In an effort to bring speculation under control, the Reichsbank called in the heads of the lending banks on the bourse and, under threat of credit restriction, advised them to put their affairs in a more liquid condition. The resulting scramble for liquidity precipitated a sudden and severe stock market relapse known in German banking history as Black Friday—May 13, 1927.[5] The stock market recovered slowly

5 See below, Chapter XI.

throughout 1927, but by 1928 Germany began to feel the effects of the withdrawal of short-term foreign loans and the 1929-1933 figures reflect the decline of security turnover which was a feature of all stock markets in the world depression.

The Berlin Great Banks enter into the money market more as lenders than borrowers, so that the percentage of their report and lombard loans gives a clearer picture of the amount of available funds than could be gained from the condensed reports of all of the banks speculating on the bourse. While the report and lombard loans of the Berlin Great Banks throw light upon the amount of interbank lending for the purchase and sale of securities, these figures cover only a small percentage of the total amount of bank participation in the stock market. A study of the securities held by the Great Banks in their own name adds some further information.

TABLE XXIII. SECURITIES OWNED BY THE BERLIN GREAT BANKS 1924-1932 [a]

Year end	Securities (in million Rm) [b]	% of total balance sheet
1913	388.6	5.2
1924	58.2	1.5
1925	65.6	1 2
1926	105.6	1.4
1927	136.9	1.4
1928	150.7	1.3
1929	211.2	1.5
1930	173.4	1.3
1931	470.1	5.0
1932	622.5	7.1

[a] Compiled from statistics in *Die Bank*, Volumes XVII to XXVI, 1924-1933.

[b] Made up of the State loans and treasury bills, securities lombardable with the Reichsbank, securities listed on the bourse and unlisted securities.

There seems to have been a change in post-war banking policy in regard to the direct purchase of securities by the banks at least up to 1930. In all other banking statistics one finds a gradual rebuilding of pre-war banking practice until, by 1926, pre-war relationships were reëstablished. However, the investments of the Berlin Great Banks in securities decreased materially and remained at a steady level of 1.2% to 1.5% of the total balance sheets throughout the critical years of reorganization of the German economy.

There are several reasons for this. In the first place, direct loans to customers were in great demand in the post-stabilization years and the interest rates were high; this gave the banks profitable outlets for funds. In the second place, the centralization of money power in the city of Berlin (especially marked after 1924) made of the Berlin Great Banks the reservoir of short-term funds. These banks, acting as central banking institutions for their branches and their affiliates, found it desirable to keep their investments in the form of short-term loans on the money market rather than in the purchase of securities on their own account. In the third place, the development of new and better techniques for the financing of their brokerage business, such as the development of the stock-clearing system of the *Berliner Kassenverein* and the organization of the *Liquidationskasse* for the guarantee of the report business, reduced the necessity for holding blocks of stocks in their own name. What stock exchange business the banks wanted to carry on could be done on a narrower margin of securities owned directly by the banks. In the fourth place, the Berlin Great Banks—while still connected very closely with industrial finance and the flotation of new shares of companies—held down the issuing of new shares and the flotation of new companies to a minimum, while supplying capital needs in other forms of finance. The new shares that came into existence were sold more rapidly on the open market than in the pre-war days. Finally, the desire to hold stocks as bank investments was held in check by the failure of German industry to establish itself on a secure profit-making foundation. Even in 1927, the most profitable business year in the entire decade, the banks did not increase their own direct purchases of securities, although they lent their support to a stock market boom. These five factors working together tended to decrease the amount of direct bank investment in securities.

The sudden increase in the percentage figures from 1931 to 1932 is indicative of the general state of the money market rather than of any change in policy, although there was a tendency for the banks to purchase shares of industrial companies in which they were interested in the year 1931, in order to hold up the price. The increase in securities held by the banks after 1931 is due almost wholly to the increased purchases of government securities. The industrial shares which had been held by the banks were written down to their market value in 1932 and the resulting loss was taken by the banks as a capital loss. Opportunities for investments decreased as the stock market began its sluggish depression era; discount credits fell off, but government demand for funds increased. In Germany, as in the United States, the portfolios of the banks became increasingly full of government obligations.

If one examines the current account figures of the bank balance sheets, some light is thrown on the percentage of secured loans granted by the banks. There is no way of separating from these lumped accounts the amount of the loans secured by collateral from those secured by other assets; nor is it possible to separate the secured loans carried on brokerage account for clients from the secured loans granted for other purposes. The figures are interesting, however, when one keeps in mind the fact that the Berlin Great Banks are known to be the largest brokers operating on the bourse, and that they are looked upon as the backbone of stock market speculation. While no accurate data are available, it is safe to conclude that a very large percentage of secured loans in current accounts is covered by stock exchange collateral. It seems probable, also, that a large portion of the secured loans in current accounts represents the typical brokerage loan of the commercial banks.

The German banks, as brokers, buy and sell securities for their clients. If one compares the percentage figures in Table XXIV with those in Table XXII, he finds that the amount of secured customer loans carried on the balance sheets of the

TABLE XXIV. DEBTORS TO CURRENT ACCOUNTS OF THE BERLIN GREAT BANKS. 1924 to 1932 [a]

Year end	(In millions of reichsmarks)		% of secured loans to total balance sheets
	Secured loans	Unsecured loans	
1913	2,087.2	628.2	27.8
1924	799.8	700.9	20.1
1925	1,485.3	840.0	26.6
1926	2,156.7	756.6	29 3
1927	2,969 7	1,093.1	31.0
1928	3,560 9	1,152.4	29.6
1929	4,330.4	1,425.5	31.5
1930	4,393.4	1,329.6	33.9
1931	3,489.1	1,234.2	37.4
1932	3,370.7	1,010.9	38.3

[a] Compiled from statistics in *Die Bank, op. cit.*, Volumes XVII-XXVII, 1924-1934.

Berlin Great Banks is very much larger than the amount of their report and lombard loans. The former give an approximate indication of the amount of the brokerage business which is carried wholly by the banks as a part of their customary business with their clients. The latter represent the amount of interbank lending indulged in by the banks to permit other banks and brokers on the bourse to engage in the buying and selling of securities. The German banks, as investors, purchase securities outright for their own account. The amount of securities held by the Berlin Great Banks as investment plus the total amount of their loans backed by securities (reports, lombards, secured current accounts) ranged from a low point of 26.5% of their total assets in 1924 to a high point of 46.9% in 1932. Stock exchange collateral, therefore, forms a very large part of the assets backing the liabilities of the Berlin Great Banks.

In addition to the banks, there are a few larger independent brokerage firms which operate on the bourse. These firms are the " free brokers " who work with their own capital and buy and sell securities for the purpose of re-sale to their clients. They are more frequently borrowers of daily, monthly and report money, than lenders; they work through the central clearing bank of the exchange—the *Berliner Kassenverein*—and also belong to the *Liquidationskasse*. They are not to be confused with the rate brokers (*Kursmaklern*) who perform the rate-fixing function and do not buy and sell securities on behalf of their clients.[6] The free brokers operate on a cash basis or on a time basis as do the banks, and their business is not materially different from the brokerage business of the banks, except for the fact that the financing of purchases and sales must be done either with their own capital or through their ability to borrow from lending banks on the bourse. The free brokers have not the opportunity to carry on a part of their business through customer loans in current accounts, as have the money market banks. The brokers carry on speculative transactions not only in the report business but in the buying and selling of options of all sorts. There is the option for the

6 Very few stocks on the Berlin stock exchange are bought and sold on a free price system such as is used in America. The rate brokers fix the daily price of stocks on the basis of orders received before the opening of the exchange. The price is supposed to be fixed at that point where the largest possible turnover will take place. From 12 o'clock noon to 1:30 *p. m.*, the rate brokers take orders for the buying and selling of stocks from banks and other bourse traders; from 1:30 to 2 *p. m.*, the rate brokers get together and determine the price of each stock on the basis of their combined orders. The rate is announced at 2 *p. m.*, and, according to bourse rules, is final. Almost all the securities traded in *Termingeschäfte* follow this procedure. See Prion, *Die Effektenbörse, op. cit.*, p. 83.

call (*Vorpraemie*) by which the buyer purchases the right to buy on call day, paying the amount of the premium on the stock in addition to the agreed purchase price if the option is taken up, and only the premium if it is rejected; the option for the put (*Rückpraemie*), by which the right to sell on call day is acquired; the double option (*Stellaje*) which permits the speculator to declare whether he will buy or sell; and the option to buy or sell additional amounts of securities on call day (*Nochgeschäft*). The amount of the premium set on option deals differs with the kind of stock, the general money market situation, the length of time the option is to run, etc., and is fixed by the brokers from day to day. Economically, the option deals perform the function of limiting the risk of loss and increasing the possibility of gain to the speculator. It also increases the turnover of securities and creates an additional demand for cash in the support of the stock exchange.

The extent to which the large industrial firms enter into the buying and selling of securities on the bourse is unknown. The importance of their connection with the bourse lies rather in the direct use of surplus funds and till money in the short-term money markets. They are, at certain periods of the month, heavy lenders of daily and monthly money and at the end of the month are apt to withdraw their funds for payroll purposes. They also build up balances for their quarter dividend and interest payments which, used in short-term loans, keeps the money market easy for a time and broadens the base of security turnover but increases the strain on settlement day. From the standpoint of the Reichsbank and its effort to control the flow of funds, the separation of industrial surpluses from the banks increases the difficulty of central bank control.

The securities business of the bourse is controlled by the Berlin Great Banks. The buying and selling of stocks and bonds forms a very large part of the business of the large commercial banks who borrow and lend among themselves to finance the total turnover. The purchase and sale of securities is intimately bound up with bank credit which can be expanded easily through the use of the stock clearing system.

A wave of popular speculative excitement cannot take place in Germany without the active cooperation of the large money market banks. It is not suggested, of course, that the Berlin Great Banks *cause* or *initiate* speculative booms (although it is quite probable that they could do even this). The banks act as brokers for their clients, but their willingness to carry brokerage accounts for their customers depends upon other profitable outlets for funds and the relative position of the total amount of the brokerage business to other kinds of bank business. As was brought out above, however, the Berlin banks were, in the pre-war period and also in the years 1924 to 1931, very fond of stock market loans because of the high rate of return. In the post-stabilization decade there was only one stock market boom of any importance (February to May 1927) which was initiated by foreign speculators and maintained by the profit enthusiasm of the Berlin Great Banks. This boom was quickly nipped by the Reichsbank.

From the standpoint of central bank control, the German system has the advantage of almost complete centralization in the Berlin money market banks. There is no doubt as to where control pressure should be applied, although there may be doubt as to the method, the timing, or even the desirability of central bank control. It should also be pointed out that the German system of stock market operation does not permit all stocks to be bought and sold on margin. Speculative booms are thus limited at the outset and are never permitted to become as widespread as is possible in the United States' stock market. Then again, while any person in Germany may buy or sell stocks for cash, buying and selling on margin is limited largely to those persons who have established current account relationships with their banks. Stock market speculation is only one type of business covered by the bank-client current account agreement; banks maintain fairly high standards for their current account customers and not all current account customers are permitted by the banks to carry on stock market speculation. Therefore, while a stock market boom may be supported by bank credit, and initiated by individual and corporate speculators, it does not, in Germany, reach out to include persons in all walks of life. The effects of an inflation in stock values may be widespread, but the manipulation of the boom itself is limited to a comparatively small number of persons. The Berlin Great Banks stand at the center of the whole operation.

From the stock market business of the banks come three types of money demand, *daily money, monthly money,* and *report money.* The latter is speculative in nature. The daily quotations of these three types of money form the best index of the general state of liquidity in the money market, although these rates are bound up with and (normally) bear a definite relationship to the private discount rate.

The Reichsbank has no direct relationship to the securities business of the bourse. It does not carry on speculative transactions in stocks and bonds and had (until October 1933) no right of open market purchases of government bonds. The Reichsbank may buy securities directly for its own investment account or it may buy and sell for cash for its customers but, as a matter of policy, this type of business is limited and has no influence upon the total amount of bourse turnover. Indirectly, through the lombard privilege granted to certain types of securities, the Reichsbank affects the stock exchange. Securities lombardable with the Reichsbank are always more desirable investments and, since the banks depend upon their ability to secure loans backed by collateral at month-end settlement day, the lombard rate of the Reichsbank may be a determining factor in the amount of money the banks are willing to lend to support the stock market. The lombard rate of the Reichsbank, however, cannot be looked upon as a direct control device over the securities business of the bourse. Its influence is apt to be felt more quickly when money is tight and the banks are already dependent upon the Reichsbank; the lombard rate has no power in itself to tighten the money market. The lombard policy of the Reichsbank is closely bound up with its discount policy.

The Discount Business of the Bourse

The bill business of any country is based upon long traditions of business usage, and there are always to be found many varities of bills with fine shades of differentiation which almost defy analysis. In Germany, the short-term financing of trade, both domestic and foreign, is done very largely through the bill of exchange, and consequently the discount business forms a large element of bank credit.

From the standpoint of general marketability three main groups of bills may be distinguished in Germany. 1) Bills discounted by the banks for their permanent customers at a preferred rate. These, for the most part, remain in the bank and are not bought and sold on the open market. In case of cash shortage, the Great Banks prefer to use these as the backing for a lombard loan from the *Preussenkasse* or the Reichsbank, to direct rediscounting. 2) Bills discountable with the Reichsbank at its private rate of discount. These are bills discounted by the Reichsbank for its own customers, and others, at a rate lower than its official discount rate and consist primarily of bills of small denominations bearing two or more signatures. And 3) bourse discounts known as "real" private discounts and subject to active trading in the Berlin money market. It is only the bourse discounts that we shall discuss at this point, since the other two groups belong mainly to that type of credit business that is not subject to open market exchange transactions. However, it is apparent that only a part of the bill business of the banks comes under the heading of bourse discounts.

The Berlin bourse deals only in mark bills of 3,000 reichsmarks denomination or over, with not less than four weeks nor more than three months to run. These are subdivided into bills at short sight running from thirty to fifty-five days and bills at long sight running from fifty-six to ninety days. Furthermore, it excludes all bills whose collectability is cumbersome—no matter how secure. Emphasis is thus placed at the outset on a high degree of liquidity. The bills traded in take many forms.

First place is given to 1) *prime discounts,* which are the acceptances of the Great Banks comparable to prime bankers' bills of the London or New York market; 2) *acceptances* of smaller banks, or banks with less than a national standing; 3) *bank guaranteed trade bills* are dealt in only to a limited extent in Germany because banking practice prefers the bank acceptance. Some firms, however, consistently use the trade bill, and in the last decade (1924 to 1933) they have gained a standing on the German exchanges. 4) *Bills drawn by large industrial firms in their own name* are coming to have a more important place on the Berlin bourse since the big industrialists have made a concerted effort to free themselves from bank control. Before the war this type of bill was looked upon with such disfavor that only a very few firms could sell their own bills in the open market. Since 1924 the prejudice has been broken down to a large extent and this type of bill has begun to compete favorably with the bank acceptance. Both the bank guaranteed trade bills and the industrial bills are limited in rediscount trading to the larger public banks operating on the bourse, such as the Seehandlung and the *Preussenkasse,* because, since they are not rediscountable with the Reichsbank, they form a more illiquid type of investment than the bank acceptance. 5) *Finance bills* and 6) non-interest-bearing short-term *treasury bills* of the Reich and of the German States are also dealt in although the latter were only of limited importance during this decade.

Although the bills dealt in fall into the above classifications, it is difficult to draw a rigid line between the various groups. In buying and selling practice, there is a differentiation made for each transaction depending on the quality of the particular bill. There tends to be more rate uniformity in the purchase and sale of prime discounts although even here certain banks have the power of discounting their own acceptances on the open market at lower rates than others. In Berlin, the *Preussische Staatsbank* (Seehandlung) can borrow at the lowest rate, followed by the mortgage bond companies, the *Preussenkasse,* and the Great Banks in that order. The acceptance of all of these banks, however, are classed as prime discounts and the published bourse rate—the private discount rate—is generally the lowest price paid during the day on this class of paper. The quoted private discount rate refers only to prime bankers' bills and the common use of the term *private discount market* refers only to the buying and selling of prime bankers' bills and Reich treasury bills. Before the war, trade bills guaranteed by banks were considered as a legitimate part of the private discount market. Now, this type of bill is rediscounted largely with the State banks, the *Berliner Handels Gesellschaft,* the *Reichs Kredit Gesellschaft* and—most important—the Seehandlung. The narrower use of the term private discount market has developed since 1924 when the Reichsbank law limited two-thirds of its rediscounting to those bills which carried three indorsements. The term "bourse discounts" is thus broader and more inclusive than the term "private discounts".

Buying and selling of bourse discounts usually takes place among the banks themselves without the intervention of a third party, although there are some banks that specialize as private discount brokers and serve to balance demand and supply. A brokerage fee is paid by the seller of the bill on each transaction, whether it takes place directly or not. Before the war, banks did not discount their own acceptances in the open market, but this has now come to be a common practice. The banks trade among themselves for rediscount, and the Berlin banks serve as rediscount centers for provincial banks and their own branches and affiliates.

The State banks and the private note banks serve as rediscount centers to some extent, but the strength of the Berlin banks tends to draw the best available bills to the Berlin market. Since the Reichsbank requires three indorsements on the bills purchased and usually does not purchase acceptances from the drawer bank, the Berlin banks customarily depend upon each other to take over bills preparatory for rediscount.

The discount business in Germany is dependent upon and intimately bound up with the central bank. The Reichsbank as the central note bank with the power of putting notes into circulation backed by bills of exchange has a direct influence upon the form, length of life, endorsements and cost of bill credit. The bill market is kept liquid by the rediscount policy of the Reichsbank and it is here that direct pressure can be brought to bear upon the liquidity of the money market. It follows, therefore, that the Reichsbank has the greater control over the money market, the larger the proportion of bank credit circulating in the form of the bank acceptance. In any analysis of central bank control policies, in which the discount rate is considered one indispensable tool of money market regulation, the proportion of bill credit to the total amount of bank credit in existence is of prime importance. The success of the Reichsbank in gaining control of the German money market in the pre-war period rested largely upon its success in developing the bank acceptance as the most desirable method of financing domestic trade. Although in the pre-war period the bill market did not play as important a part in the German economy as the London bill market did in the English economy, the bill was the backbone of the German money market. The Reichsbank discount rate was the controlling rate to which all other monetary demands were geared. The German banks were accustomed to grant bill credits to an amount at least equal to their combined capital and surplus as compared with bill credits granted by the London banks of five to six times their combined capital and surplus. It is estimated that there were in existence at any one time an average of two and one-half billion marks of bank acceptances in the pre-war Berlin money market.

The efficiency and elasticity of the pre-war private discount market was almost wholly lost in the post-stabilization period. A private discount market did not exist at all until 1925, when the Reichsbank took specific steps to bring the bank acceptance back into favor. In spite of the efforts of the Reichsbank, it is one of the most outstanding characteristics of the post-war money market that the discount business has lost its old place of leadership and that other forms of business finance—not subject to direct Reichsbank control to the same extent—have taken its place. The following figures show the development of the bank acceptance from 1925 through 1933.

TABLE XXV. BANK ACCEPTANCES [a]

(In 1000 reichsmarks)

Year	Total circulation [b]	In portfolio of the Reichsbank
End of		
Feb. 1925	79,300	36,200
June 1925	240,800	143,900
June 1926	349,200	88,100
June 1927	696,600	439,800
June 1928	650,800	279,700
June 1929	867,400	605,100
June 1930	783,200	229,900
June 1931	1,207,000	1,094,300
June 1932	1,153,800	553,200
June 1933	1,045,500	516,100

[a] Emil Puhl, *Wiederaufbau des Geld und Kapitalmarktes, Untersuchung des Bankwesens, op. cit.*, Part I, Volume II, p. 221. These figures were compiled by Dr. Puhl from private statistics of the Reichsbank.

[b] At the end of 1913 the total circulation of acceptances in the money market banks alone was 2.3 billions of marks

Thus, although the German banks quickly rebuilt the total amounts of bank credit outstanding in the post-stabilization period so that they actually surpassed the amount of credit carried by them in the pre-war period, the acceptance credit scarcely reached 50% of its pre-war volume. The failure of the private discount market to regain its pre-war strength rests upon the inability of the market to reëstablish itself in the financing of foreign trade. In the seven years 1924-1930, the largest proportion of Germany's foreign trade was financed through foreign funds, whereas before the war finance through the German bill was the accepted form. This meant that, prior to the war, there was a large foreign demand for mark bills which did not exist after the war. Foreign short-term funds in Germany were held in the form of bank balances after 1924 rather than in the form of the mark bill of exchange. From the standpoint of the Reichsbank, this shift from foreign buying of bank acceptances to liquid balances in banks has meant that the control of the flow of foreign funds has been taken out of its hands. Its discount policy, which before the war was looked upon as supplementary to its gold and foreign exchange policy, has had little or no effect upon the flow of these funds in the post-stabilization period. Time and again we shall see the Reichsbank forced to abandon as unworkable the traditional tool of the discount rate as a control device simply because the element of the money market directly affected by discount rate —the bankers' bill—was so small in proportion to the total amount of funds available as to be insignificant.

The private discount market was further limited by the legal restriction placed upon the Reich treasury bill as a means of finance. The Reichsbank was permitted in 1926 to rediscount 400 million reichsmarks of these bills, but they were not used by the Reich until 1928. After they began to be issued, they served to broaden the discount market to some extent, although their total amount was too small to be relatively important to the market. Table XXVI shows the development of the Reich treasury bill.

The Reichsbank purchased comparatively few treasury bills directly, but stood ready to rediscount the bills for the banks. The largest purchasers were the Berlin Great Banks.

The Foreign Exchange Business of the Bourse [7]

The increased importance of the foreign exchange business to the German money market marks one of the most basic of

7 See *Der Bankkredit, op. cit.*, pp. 80-105.

post-stabilization structural changes. The steady stream of foreign short-term funds toward Germany, which began in 1925 and stopped abruptly in 1931, meant that the German money market had to adapt itself to the ebb and flow of these funds, and in so doing it became dependent upon them. There was no other single force as powerful in determining and shaping the character of the post-war German money market, and through the money market the entire economy. Tempted by the higher interest rates in the German market, foreign funds came into the banks in the form of bank deposits

TABLE XXVI. REICH TREASURY BILLS, 1928-1933 [a]
(In 1000 reichsmarks)

Period	Issued by Reich	Open market purchases	Public purchases (directed by Reichsbank)	Foreign purchases (B. I. S)	Reichsbank purchases
End of					
June 1928	217,200	75,550	140,650	——	1,000
June 1929	400,000	140,630	101,200	——	158,170
June 1930	400,000	281,400	68,570	43,500	6,530
June 1931	400,000	159,140	86,780	80,420	73,660
June 1932	398,880	302,750	12,200	82,420	1,510
June 1933	400,000	327,640	28,290	29,000	15,070

[a] Emil Puhl, *Wiederaufbau des Geld und Kapitalmarktes, Untersuchung des Bankwesens, op. cit.,* Part I, Volume II, p. 223. These figures were compiled by Dr. Puhl from private statistics of the Reichsbank.

(*Devisenleihe*) either in foreign currency deposits or in Reichsmark deposits. The majority of foreign bank deposits was in the form of foreign currency because of the uncertainty felt by foreigners in the stability of the reichsmark. Also, tempted by the lower interest rates in foreign markets (and because of the inability of the mark bill to find an international market), German exports were financed largely by the foreign bank acceptance. Different money market techniques were developed to handle foreign funds in the form of bank deposits and in the form of acceptance credits.

FOREIGN BANK DEPOSITS (*Devisenleihe*)

Cash credits were placed in German banks by foreign industry and trade, and by foreign banks, either as demand deposits or as deposits for a fixed period of time, from one to three months. The interest rate on time deposits was agreed upon at the time the deposit was made and was from 1½% to 2% less than the current Reichsbank rediscount rate. Frequently, these funds were prolonged after a new interest agreement had been reached. Reichsmark deposits arose largely out of foreign business in Germany, the profits from which were not returned home but were kept at interest in German banks. Foreign currency deposits were built up by direct transfer of funds through cable transfers, drafts, and foreign bills. Out of this transfer of funds developed the typical forward exchange finance transaction (*Swapgeschäft*). A German banker taking in dollar credits, for example, and having immediate use for reichsmarks and not for dollars, sold his dollars on the open market and immediately contracted to buy back the same amount of dollars at a future date. This interbank "swapping" of foreign exchange became an accepted practice and was carried out regularly for all foreign short-term bank deposits. Forward exchange deals in currencies other than reichsmarks were carried on to protect German exporters and importers against possible fluctuations in foreign money rates. *Swapgeschäft* in foreign exchange, as opposed to *Termingeschäft* in the stock market, had no fixed customary date for life of the contract—such as the medio and ultimo stock contracts. Each foreign exchange forward contract was fixed in accordance with the length of the particular foreign deposit or —in the case of trade—in relation to the goods contract. There was, therefore, a constant demand and supply of foreign exchange in the market. The Reichsbank, however, bought and sold foreign exchange in Germany only for cash and only for immediate delivery. By purchasing foreign exchange in the open market the Reichsbank could swell the reichsmark deposits of German banks but could also decrease their ability to cover their sale of foreign exchange by a future contract to purchase.

There seems to have been no limit to the German bankers' willingness to accept foreign short-term deposits. The volume of foreign deposits bore no relationship to the capital and surplus of the bank and, by the end of 1930, it had reached fantastic figures. The *Darmstädter und Nationalbank,* for instance, with a capital and surplus of sixty million reichsmarks, carried short-term foreign deposits of more than 1,000 million reichsmarks at the beginning of the summer crisis of 1931. In spite of the threat to the German economy in the possibility of sudden withdrawals, the immediate gain overshadowed the basic weakness. The position of the banks was apparently strengthened. They were able through increased deposits to lend freely in the money market at rates that were relatively high. They could extend their support to industry through increased bank loans and through general money market liquidity resting upon foreign funds. They could guarantee essential credits to German business. The inherent viciousness of a system in which foreign deposits in Germany greatly exceeded German bank balances abroad became apparent in 1931, and when the system collapsed it pulled the whole German economy down with it.

FOREIGN ACCEPTANCE CREDIT

Foreign acceptance credit carried by the German banks for their customers was arranged with correspondent banks in various money centers. This was a credit agreement between the banks through which the German bank was granted a "credit line" by its foreign correspondent upon which its clients, both exporters and importers, could draw drafts. The acceptance of the draft—always drawn in terms of the foreign currency—was done either by the German bank or by its foreign correspondent. The bills drawn were usually three-month bills, although the length of life varied for different types of trade. The total amount of acceptance credit held abroad by the German banks at any one time depended upon the trade balance which fluctuated with the business cycle. The total amount of foreign bank acceptances in the German market, however, was usually much greater than that of the domestic acceptances in the private discount market. The banks at first attempted to limit their foreign acceptance credits to an amount equal to their combined capital and reserve because of the danger of illiquidity in becoming too heavily involved in foreign bills. But by the middle of 1930 some large Berlin banks—notably the *Dresdner Bank* and the *Darmstädter und Nationalbank*—carried foreign acceptance credits of approximately three times the amount of their capitalization. This type of finance of German trade meant that German banks, in accepting bills drawn in terms of foreign currencies, were committing themselves to make payments which could be met only if there was foreign exchange for sale in the Berlin market. Since the German trade balance was generally unfavorable the foreign acceptance commitments of German banks could only be met as long as fresh foreign funds poured into Germany. After the crisis of 1931, only the Standstill Agreements protected the German banks from bankruptcy and foreign banks found that more capital was tied up in Germany than they had foreseen.[8]

The Reichsbank had no direct control over the flow of foreign short-term funds in Germany. Indirectly it probably encouraged them through its willingness (in the interest of stable currency) to purchase all foreign exchange presented to it. It was thus counted upon by the money market banks as a ready market for whatever foreign exchange was not absorbed in daily trading, and as long as foreign acceptances were kept in the form legally rediscountable by the Reichsbank, bank investments in foreign bills were liquid investments. The Reichsbank rediscount rate was never a direct check upon the flow of foreign short-term credits since the Reichsbank rate, because of conditions present in the domestic economy, was always higher

8 See below Chapters VI and IX.

than the rates in other countries. More often than not the Reichsbank rate was determined by the general conditions of the money market, which was in turn determined by the presence or absence of foreign funds. The struggles of the Reichsbank to bring this section of the money market under control will become apparent as we discuss in the later chapters the economic development of Germany in the post-stabilization years.

THE INTERRELATIONSHIP OF BOURSE AND BANKS

Bourse trading in securities, discounts and foreign exchange is so intimately bound up with the active credit business of the commercial banks that it is impossible actually to separate the two. The following outline shows these interrelationships. The active credit business of a German commercial bank consists of accommodations: [9]

I. To Clients
  1. Book credit
  2. Discount credit
  3. Lombard credit
  4. Acceptance credit
  5. Report credit

II. To Banks on the Bourse Money Market
  1. Daily money
  2. Monthly money
  3. Rediscount credits
  4. Report money

The bourse is, in the last analysis, simply the balancing factor in the total supply and total demand for short-term funds. Banks carrying on an active credit business for their clients are at times borrowers and at times lenders in the money market. Generally the large Berlin banks are money lenders and

9 Eugen Blum, *Die deutschen Kreditmärkte nach der Stabilisierung* (Berlin, 1929), p. 49.

middle-sized and small banks are money borrowers in the open market; this, however, is not always the case, for the Berlin banks often depend upon each other in interbank borrowing. The organization of the business life of Germany about the month-end settlement day and quarter-day makes all banks, large and small, depend upon the Reichsbank at these periods except in times of extraordinary ease in the money market. While all banks deal in all types of money market transactions, a certain demarcation of function has grown up among the Berlin banks. The Joint Stock banks are looked upon for daily money and report money; the Seehandlung is now the largest single rediscounter of bank-guaranteed trade bills; the *Verkehrskreditbank* specializes in monthly money loans on the money market; the large private bankers such as Mendelsohn and Co., and Lazard, Speyer and Ellison handle the largest amount of foreign bank acceptances. The increased size and importance of the public banks has served to centralize the money-lending function in Berlin and, in the ten years under discussion, aided materially in rebuilding the money market through their use of public funds.

MONEY MARKET RATES

The general position of the money market in relation to credit demands from trade and industry is measured by the interest rates charged on various kinds of short-term loans. High rates are indicative of credit scarcity in relation to demand; low rates, of surplus. " High " and " low " are themselves relative terms—relative to rates in the rest of the world, relative to the general state of the business cycle, to all price levels—even to a customary idea as to what *ought* to constitute high and low. In speaking of a central bank discount rate, there may be a further qualitative limitation in the sense that rates *ought to be made* to be higher or lower according to some estimate made on other than quantitative grounds. Broadly speaking, however, in a profit economy the price paid for the use of funds is indicative of the general willingness of lenders and borrowers to use available funds. The specific channels of use will furthermore be guided by the interrate structure of the money market.

There are in Germany, as we have seen, three broad divisions in the money market: 1) bill discounting, 2) lombarding, and 3) buying and selling of foreign bills, drafts, and the like. Bill discounting is governed by the private discount rate—the rate quoted on prime bankers' bills. This in turn is governed by, and bears a definite relation to, the Reichsbank official rediscount rate. Lombarding rates are those for daily money, monthly money, and report money, and are related to the Reichsbank official lombard rate. The rates charged for foreign bill discounting are guided from day to day by the rates charged on the same class of paper in foreign money centers. The rate charged on each particular type of money market loan is itself a supply and demand price; but supply and demand are in turn governed by the interrate relationship and the possibilities offered of increased profit through transferring investment from one type of loan to another. One further type of short-term credit should be considered here, for it bears a definite relationship to the money market, although it is not properly a part of it. The bank loans to customers carried as debit items in current account balances are integrated with the money market rate structure. Clients of banks may shift their credits from bill credit to open current account credit depending upon the relative cost.

The pre-war rate structure was more or less fixed and had developed out of money market customs and techniques. The Reichsbank official rediscount rate was the keystone of money market rates to which all others were geared in a definite relationship. The private discount rate was lower than the bank rate usually by 1%. The bank charge for customer loans was always higher than bank rate by about 1%. Customarily, the Reichsbank lombard rate was kept higher than its rediscount rate, and bourse lombards, using the Reichsbank lombard rate as a guide, fluctuated about the Reichsbank lombard rate. The daily money rate was normally less than, and the report rate more than, the Reichsbank lombard rate. Thus a typical pre-war money market rate relationship arranged from lowest to highest would be:

Private discount rate
Reichsbank discount rate
Current account loan rate
Bourse lombard rate for daily money
Reichsbank lombard rate
Bourse lombard rate for monthly money
Report money

Such an arrangement was, of course, only approximate. It was never completely maintained because the individual divisions of the money market were subject to constant fluctuations as various factors in the political and economic situation, both national and international, played upon the hopes and fears of borrowers and lenders. It is important, however, to keep this skeleton pre-war structure in mind when studying the post-stabilization money market because this was considered the "norm" by which the sickness or health of the money market in later years was judged. Since a large part of the attention of the Reichsbank in the period 1924 through 1933 was devoted to bringing the money market back to "normal", a study of the specific rate structure in the post-war money market will be taken up in detail when we discuss the discount policy of the Reichsbank.[10] The pre-war relationship in money market rates was maintained through the predominant importance of the bill market over the securities business and the foreign exchange business. After 1924, the foreign exchange business assumed a heavy priority and affected the stock securities turnover. The bill market was paralyzed not by the credit cost but by factors inherent in the German economy. The Reichsbank rediscount

10 See below, Chapter VIII.

rate, therefore, lost structurally its control position, which made the money market temperamental and at times uncontrollable.

THE MONEY MARKET AND THE CAPITAL MARKET

Although there is a convenient distinction in the use of the term "money market" in referring to short-term funds and "capital market" in referring to long-term funds, there can, actually, be no hard-and-fast line drawn between the two. Broadly speaking, it is considered the function of the money market and the commercial banking system to supply the working capital needs of trade and industry. The function of the capital market is to supply the funds for expansion and replacement of capital goods. "Created" bank credit is supposed to be the chief source of supply for the former, savings for the latter. It is not our purpose here to enter into the theoretical arguments involved in these assumptions, nor to point out the extreme mental sluggishness required for such an uncritical use of the terms "working capital," "created bank credit," "savings," and the like. In any credit economy there is a credit demand ranging through all possible time variants, from the call loan lasting for twenty-four hours to the bond loan of fifty years or more. In Germany, the commercial banking system sees to it that all credit demands are met as completely and as efficiently as possible—efficiency measured on the basis of relative cost, security, and shiftability of the type of loan. The credit demand may be satisfied by the willingness of banks to discount bills, to grant open book credit, renewable from year to year ad infinitum, or to sell for their clients new securities on the open market. These are all simply different types of debtor-creditor relationships. In Germany, it was considered wise banking policy to shift as much of the credit risk as possible from the banks to the public through stock flotations.

It should be understood, however, that it is only this ability of the banks to transfer a part of their credit burden to investors in the open market and the willingness of investors to purchase stocks and bonds that is indicated by the term capital market. In Germany, long-term finance of industry is so inextricably bound up with the commercial bank credit that no distinction of short-term and long-term loans is possible until the actual conversion of a part of the industrial indebtedness to the bank has taken place. Even in other countries the use of time divisions of long and short-term loans to identify capital market and money market appears to be a false distinction the more one analyzes bank credit practice. Particularly is this true in Germany where it is looked upon as an essential part of a bank's duty to its client to supply his credit needs at all times, even if market conditions are not ripe for the transference of that credit into long-term securities.

Long-term industrial finance existed in Germany in the post-stabilization period even if a capital market did not. New industrial shares and long-term bonds could not be floated with ease in the German market at any time during the ten years under discussion. Some capital issues were of course absorbed, but at rates of interest so high as to make bank credit finance far more attractive to industry. This is generally considered as one of the greatest weaknesses of the German commercial banking system—that banks extended their industrial commitments beyond the point of safety. One might point out, however, that no banking system is "safe." The German banks were made to bear the direct risk burden of all types of credit but from one standpoint, this is an effective method of socializing credit risks of all sorts. Banks—of the size and importance of the German banks—cannot be permitted to fail. The capital market depends upon the estimates of individuals as to the long-run prosperity of a country. What was really unsafe in Germany was the future of the economy itself. The ability of the German commercial banks to handle the type of finance generally considered the province of the capital market, in the face of the post-stabilization pessimism as to the future, was responsible for the rapid recuperation of the German economy from 1924 to 1928. The real failure of the German banking system lies not in its long-term industrial finance through bank credit and money market techniques, but, as we shall see, in its absurd willingness to expand that bank credit on the shaky foundation of funds borrowed abroad.

THE MONETARY SYSTEM, THE BANKS, AND THE MONEY MARKET

We are now in a position to consider more specifically the outstanding characteristics of the money and banking system of Germany in the decade 1924-33, and to consider in particular the problems involved in central bank control of the banking system.

TABLE XXVII. CASH IN CIRCULATION—1925; 1929–1932 [a]
(In millions of reichsmarks)

Year end	Total [b]	Scheide-münzen	Renten-bank notes	Reichs-bank notes	Private bank notes	Cash in banks [c]	% of cash in banks to total
1925	4,493	474	1,536	2,316	166	280	6.2
1929	5,981	963	435	4,403	180	445	7.3
1930	5,882	964	376	4,361	180	488	8.2
1931	5,857	1,038	410	4,228	181	372	6.3
1932	5,832	1,400	405	3,844	183	302	5.2

[a] *Untersuchung des Bankwesens*, Part II, *op. cit.*, p. 472-473. These statistics compiled by the 1933 German bank investigation commission are the most complete and reliable German bank statistics; unfortunately, comparable statistics are given only for the years 1925 and 1929 to 1932 inclusive. The banks included are all banks carrying on commercial banking in Germany.

[b] Exclusive of the cash held by the Reichsbank.

[c] *Ibid.*, pp. 26-34. These figures are simply for cash held in the tills of the banks; they do not include Giro deposits at the Reichsbank nor till cash of the Reichsbank.

The monetary system of Germany rests solidly upon the Reichsbank note. Actually, cash is made up of 1) token money (*Scheidemünzen*) which is coined by the government and is used to meet all cash needs up to ten reichsmarks; 2) the rentenbank note which was the stabilization currency; 3) the notes of the four private note-issuing banks; and 4) Reichsbank notes. Cash payments are used in Germany more generally than they are in this country and the majority of cash in circulation is held in the hands of the people and is not deposited in banks. The relationship between the different kinds of cash in circulation and the amount of cash held by the banks is shown in Table XXVII.

The Reichsbank note forms the largest single element of the total amount of money in circulation, ranging from a low point of 51% of the total in 1925 to a high point of 74% in 1929. The Reichsbank note (and the private bank note) is supposed to be the elastic element in the money in circulation. Notes are put into circulation by the Reichsbank in response to the demands made upon the central bank for cash. A large proportion of the Reichsbank notes in circulation remains permanently in the hands of the people. The cash demand of the banks on the Reichsbank increases more or less regularly at month-end and quarter-end settlement days when the banks depend either upon their ability to rediscount bills with the central bank or to get lombard loans. Normally, however, this month-end and quarter-end demand is temporary, and after these periods have been safely passed the excess cash returns to the banks and ultimately results in the withdrawal of bank notes from circulation. The up-swings of the business cycle cause a more lasting demand for cash and tend to bring the banks into greater dependence on the central bank. The ability of the Reichsbank to issue bank notes is limited only by the legal requirement of the maintenance of a 40% gold cover for all Reichsbank notes in circulation (this provision of the law was repealed in July 1931).

The percentage of cash held by the banks to the total amount of cash in circulation is very low in Germany. Cash in banks accounted for from a low point of 5.2% of the total in 1932 to a high point of 8.2% in 1930. If one compares this with the till cash of the American banks, 13.3% on June 30, 1934,[11] one finds a wide variation in the use of cash in Germany and in the United States. Till cash is, after all, kept by the banks only to meet the daily cash demands of depositors. In Germany, there seems to be a much greater separation between the public and the banks. A large proportion of the German public has no connection with the banks whatsoever; all incomes and all payments are in the form of cash. This group saves either through the postal savings system or through the savings banks, but such deposits in Germany are purely savings deposits and require notification for withdrawal. To some extent, in the post-stabilization period, there has been an increase in the Giro deposits of the savings banks and of the postoffice, but these deposits require a comparatively small cash holding on the part of the banks concerned. The banks, on the other hand, hold only a small percentage of their total deposits in the form of demand deposits. Also, the use of checks against bank deposits is less developed in Germany than it is in the United States. As we have brought out above, the majority of the cashless transfers of funds (*Bargeldlosverkehr*) is, in Germany, handled by the Reichsbank through its Giro clearing system. This relieves the banks of the necessity of keeping cash on hand to meet adverse clearing-house balances.

One further factor of importance which relieves the banks from the necessity of large cash holdings should be emphasized. The German banking system is a highly unified and centralized system. The various money market banks are all central banking institutions which receive deposits from other banks, grant rediscount credit, act as brokers on the stock exchange, and handle the clearing and collection of checks. These banks have developed among themselves a strong sense of interdependence. They have also developed money institutions which can only be looked upon as bankers' banks, such as the *Kassenverein* and

11 *Annual Report of the Comptroller of the Currency for the Year Ending Oct. 31, 1934*, p. 99, and *Federal Reserve Bulletin*, March 1935, p. 151. The American figure fluctuates slightly, but remains fairly constant between 12% and 13%.

the *Liquidationskasse,* which tend further to unify and centralize the banking system and to encourage the interdependence of the money market banks. Any one Berlin bank depends first of all upon its ability to rediscount bills or to get lombard loans from other money market banks in order to improve its own cash position. It is only when the entire banking system feels at the same time the necessity of enlarged cash holdings that the banks become dependent upon the Reichsbank.

TABLE XXVIII. CASH PLUS GIRO DEPOSITS IN RELATION TO TOTAL DEMAND DEPOSITS [a] — 1925; 1929–1932

Year end	Cash in banks	Giro deposits with the Reichsbank [b]	Deposits due within seven days [c]	Percentage of cash and Giro deposits to total seven-day deposits
	(In millions of reichsmarks)			
1925	280	414	—	—
1929	445	545	7,232	13.6
1930	488	493	7,067	13.8
1931	372	446	6,319	12.9
1932	302	368	5,711	11.7

[a] *Untersuchung des Bankwesens,* Part II, *op. cit.,* pp. 26-34 and p. 145. Figures include all banks carrying on a commercial banking business.

[b] Includes deposits with the German Clearing House (*Abrechnungstelle*).

[c] Excludes all deposits "held on account of a third party", which in Germany means, for the most part, foreign bank deposits. The separation of total deposits held in the banks into those due within seven days, those due within three months, and those held for longer than three months was not required until the improved balance sheets were put into effect in 1928. These figures include interbank deposits of the German banks.

The German banking system is not a reserve banking system. Giro deposits with the Reichsbank (wholly voluntary on the part of the banks) form the only cushion between the sudden cash demands which might be made upon them and their actual cash holdings. Table XXVIII shows the relationship between cash in banks, Giro deposits with the Reichsbank, and total net demand deposits of the German banks. Total net demand deposits are deposits due within seven days—the closest equivalent of a pure demand deposit in the German banking system.

The German banks carry on their business with a very low cash-deposit ratio. The percentage of cash plus Giro deposits with the Reichsbank to the total demand deposits ranged from 11.7% in 1932 to 13.8% in 1930. The banking system, therefore, tends to resort to rediscount credit from the Reichsbank to meet their cash demands much more quickly than the banks in the United States. On the basis of these figures, however, one cannot draw the conclusion that the German banking system is unsound. German banking differs radically from American banking. Its banking techniques are highly developed; it has carried centralization to the point where the need for cash has been reduced to a minimum. The German custom of settling commitments at the end of each month means, however, that there is a regular demand upon the central bank for additional credit at these times. The larger the amount of business done by the commercial banks, the greater their dependence on the Reichsbank on settlement day.

In the decade 1924-33, the dependence of the banks on the Reichsbank was peculiar in that the flow of foreign short-term funds toward Germany supported a rapid expansion in the business of the commercial banks but did not increase materially the cash drain on the banks (*i.e.*, the reichsmark drain). As foreign funds became relatively more important to the total demand liabilities of the banks, their foreign exchange business with the Reichsbank became relatively more important.[12]

12 How important foreign short-term deposits were to the total demand liabilities of the German banks can only be estimated, since no accurate data are available. If one accepts the figure of eight billion reichsmarks at the end of Dec. 1930 (estimate of the second Basle committee), one finds that this amount is more than the total of domestic demand liabilities on the same date (7,067 million reichsmarks). It is probable that a portion of these foreign deposits was not strictly demand deposits, but was under contractual agreement for any period up to three months. Domestic short-term liabilities

For the Reichsbank, this meant that its bill business declined, its foreign exchange business increased, and its power to control the banks in the money market was shifted from its discount policy to its foreign exchange policy. And for the entire banking system it meant that cash to meet its demand liabilities began to mean, to an increasingly large extent, foreign exchange. Upon the ability to get foreign exchange either in the open market or at the Reichsbank, the soundness of the German banking system depended. Under the German monetary system in which the Reichsbank note formed fifty to seventy percent of the total amount of currency in circulation, and in which the bank note could be issued with a gold, foreign exchange and bill of exchange backing, foreign exchange could be easily converted into reichsmarks for domestic use. To reverse this process, and to convert reichsmarks into foreign exchange in order to meet a sudden foreign run on the banks, was possible only within the limits set by the gold and foreign exchange holdings of the central bank. The safety of the entire money and banking system of Germany became dependent, not upon the central bank's ability to put reichsmarks into circulation to meet any sudden domestic cash drain upon the banks, but upon the Reichsbank's ability to meet all possible demands for gold and foreign exchange. This was an insidious rotting of the structure of the German money and banking system. It cannot be lost sight of in any discussion of the control policies of the Reichsbank in the decade 1924-33.

of the banks up to three months amounted on December 31, 1930 to fifteen billion reichsmarks. The foreign deposits were therefore slightly more than one-half of the domestic liabilities—or about one-third of the total bank deposits due within three months.

CHAPTER V

THE REICHSBANK AND GERMANY'S ECONOMIC DEVELOPMENT 1924-1928

THE control policies of a central bank are limited and conditioned by its own charter and by its relationship to the commercial banks and the money market. But the situations which force the bank to take action are inherent in the general economic development of the country. The nature of the problems presented probably determines, to a very large extent, the central bank's willingness to pursue broad objectives identified with social and economic welfare. The role played by the Reichsbank in the German economy from 1924 to 1933 is only understandable on the basis of a knowledge of the manifold problems presented to the Bank for solution as the German nation tried, first, to pull itself out of the monetary chaos of the inflation and, second, to readjust itself to the post-war world economy.

At the beginning of 1924, Germany was just emerging from an inflation so serious that it had paralyzed the entire economy. The monetary unit had lost its standard of value function and had been practically repudiated as a medium of exchange. The velocity of circulation of money had reached fantastic proportions. At the height of the inflation shops remained open only three hours a day—in the morning after the publication of the first index number, after luncheon when the noon index number was released, and once again in the evening when the final index number of the day was made available. Only by spending all of one's money at the earliest moment could any commodity of value be obtained, and often not even then. There are no complete estimates of the amount of money in circulation in Germany in the last frantic days of the inflation. Dr. Schacht estimated the total paper money (Reichsbank notes and all kinds of emergency money at 1.5 sextillion marks,[1] although it is doubtful whether even this amount adequately allowed for all of the emergency money which was being printed by every city, town, and hamlet in Germany. The structural relationships of the economy were thrown out of balance. Banks lost their deposit, lending, and saving functions; the money market was destroyed; all investments were unsafe; real wages lagged far behind prices; rents (fixed by law) were abnormally low. The rush to spend created an artificial stimulation of the heavy industries and a consequent over-expansion of fixed capital goods.

Stabilization of the currency meant not only the introduction of a new unit of value and the withdrawal of all inflation money from circulation, but it meant also determination to maintain the value of the new unit in the face of almost insuperable obstacles. The dramatic fight for stabilization has been told by Dr. Schacht.[2]

The Rentenbank was established on October 23, 1923. Its capital was fixed at 3.2 billion rentenmarks raised by a mortgage on all landed property in Germany. The value of the new unit was fixed to the dollar parity of the old gold mark; the rate of exchange between paper marks in circulation and the new rentenmark was one trillion to one, or, for the purposes of the foreign exchanges, 4.2 trillion paper marks to the dollar. The absolute contingent of Rentenbank notes was fixed at the amount of the capitalization of the bank—3.2 billions.

On November 15, 1923, the Rentenbank note was introduced. All credit to the German government was stopped but the Rentenbank granted to the government an account of 1.2 billion rentenmarks for paying wages, salaries, and the like. A further 1.2 billion was granted by the Rentenbank to the Reichsbank, which immediately offered to exchange old Reichsbank notes for Rentenbank notes at the rate of one trillion to one. Deposits

1 Hjalmar Schacht, *The Stabilization of the Mark* (New York, 1927), p. 106

2 *Op. cit.*

held by clients in the Reichsbank were converted into rentenmarks and, from November 15, the Reichsbank carried on its business in terms of the new currency. The Rentenbank granted seventy million rentenmarks to the four private note banks which immediately began the process of reducing their own notes and of granting only Rentenbank note credit.

The actual transference from paper money to Rentenbank money was accomplished more easily than was anticipated because of the attitude of the people, who clutched frantically at any medium of exchange that gave promise of stable value. By November 20, 1923, the theoretical value transfer had been accomplished, although the actual withdrawal of inflation money was slow. In the occupied territories, however, speculation in the paper mark continued and emergency money was still put in circulation. The Reichsbank took the first decisive step which showed its determination to support the rentenmark, when it announced on November 17, that, after November 22, no emergency money of any sort would be accepted by the Bank, and that on November 26, it would begin to present emergency money to the issuers for redemption. This step also improved the foreign exchange position of the Reichsbank and made it easier for the Bank to maintain dollar parity. Since Reichsbank credits were granted only in rentenmarks, the speculators were forced to sell their foreign exchange for rentenmarks to meet their obligations, and on December 10, 1923, the dollar rate was at par in Berlin and in Cologne. It is estimated, however, that on January 1, 1924, there remained about 150 million dollars of emergency money in circulation,[3] and that it did not disappear completely until the introduction of the gold mark in October 1924.[4]

The second decisive action taken toward stabilization was the refusal of the Rentenbank, on December 15, to increase the credits granted to the German government. These had

3 6.3 trillion paper marks.

4 Peter P. Reinhold, *Germany Since the War* (New Haven, 1928), p. 77.

originally amounted to 1,200 million rentenmarks, 300 million of which were used to repay the Reichsbank for loans granted to the Reich. The 900 million remaining rentenmarks had been practically exhausted by December 15. Dr. Hans Luther, Finance Minister of the Reich, instead of clamoring for assistance as he might have done, drastically reduced government personnel, fixed new taxes that fell heavily on war and inflation profits, and fixed early dates for tax payments. In this way, he was able to bridge the gap in public finances until January 1, 1924, when tax collections fell due, and to bring the budget of the Reich much nearer a balance than it had been for many years. These drastic governmental measures were carried through at a heavy cost to the German economy. Unemployment, bankruptcies, curtailed production and falling prices lasted throughout December and January. Nevertheless, the first steps out of monetary chaos had been accomplished by the beginning of 1924— the introduction of a medium of exchange that held promise of stability and a governmental budget that held no threat to the maintenance of that stability.

The government had ordered all businesses in Germany to readjust their balance sheets to the new gold basis by January 1, 1924.[5] This process of writing down balance sheets brought out the tremendous loss Germany had suffered through the inflation. Banks and industry found that in terms of gold they had very few assets and practically no working capital. The speculative boom of the inflation years had meant frantic extension of plant and equipment to meet the demand for goods, and this had resulted in an over-extended plant capacity, some of it of doubtful quality. The dumping of cheap German goods on foreign markets during the inflation had meant a "national clearance sale" for Germany, through which she had succeeded in ridding herself of all available raw material. Furthermore, through the war, she had lost as a nation a large portion of her

5 Although banks and business kept their accounts in the stablized currency from January 1, 1924, stabilized balance sheets were made public very slowly and it was not until the end of the year that the full extent of Germany's capital losses became known.

natural resources: twenty percent of her agricultural territory, her coal, tin, and zinc resources in the east, and important iron ores in the Saar. Industry found itself forced to make wage payments in the new currency, to pay for raw materials with the new rentenmark and to keep its profit accounts in a unit of stable value. The pressure on the banks for capital was so great as to send interest rates soaring. The Reichsbank was the sole credit source.

If one summarizes the assets and liabilities of the German nation at the beginning of 1924 one finds on the asset side, 1) a provisional stabilization of the currency, 2) a balanced national budget, 3) a labor population eager and willing to work, 4) an adequate (if clumsy) plant capacity. These, however, were faced with liabilities of 1) uncertainty as to the success of stabilization—particularly foreign distrust, 2) a heritage of speculative fever which could not easily be stamped out, 3) high and even crushing taxes, 4) impoverishment of the population—especially of the middle class which had been the backbone of the German nation, 5) growing unemployment, 6) loss of valuable natural resources, 7) complete lack of working capital, 8) a non-existant capital market, but pressing capital demands, and 9) a disorganized short-term money market trying to meet the demands on its limited resources—the disorganization reflected in fantastically high interest rates. This was the economic situation that faced the Reichsbank at the beginning of 1924.

The first necessity was the patient rebuilding of the complicated mechanics of an exchange economy. Dr. Schacht, in speaking of the tasks facing the Reichsbank at this time,[6] said that the Reichsbank had to

1) Promote
    a. intensification of production
    b. economy in industry
    c. domestic capital accumulation

6 Hjalmar Schacht, *The End of Reparations* (New York, 1931), pp. 148-149.

2) Arouse confidence in German credit capacity
3) Get favorable terms for German long-term loans, and
4) See to it that capital was used productively.

This summary by the President of the Reichsbank of the objectives of the central bank in the emergency of 1924 states clearly enough the Bank's own conception of its role. The Reichsbank could no longer be the central bank of the pre-war era, concerned primarily with serving as a source of funds in a smooth credit economy and using its discount policy as a quantitative means of control over the supply and the demand of credit. It was forced to assume leadership in every field of economic life and to use its own judgment as to what constituted economic welfare for the nation. Thus, in the ten years under discussion, we see the Reichsbank using its influence to bring about objectives considered by it desirable, and we see it using techniques that were unheard-of in pre-war days. At times, it was successful in attaining its objectives, at other times it was hampered by factors beyond its control; but always it was deeply concerned with qualitative regulation of the whole economy.

That the Reichsbank was the central figure in bringing Germany back to some semblance of normality in its economic life, there can be no doubt. It had taken the lead in pulling the nation out of chaos; it maintained and enforced its authority, in the first year after stabilization, through its strategic position as the sole source of credit in the starved economy. The fight for maintenance of its power to rebuild a balanced economy is the story of the Reichsbank in the following years.

Dr. Schacht has listed the Reichsbank's guides to its credit policy. These are 1) note covering, 2) the condition of the foreign exchanges, 3) total money in circulation, 4) price level, 5) open market interest rates, 6) speculation, and 7) general economic development. "I believe," he said, "that one can group all of these together and say simply that the total economic development must be carefully followed and the discount policy of the note bank brought into harmony with it. . . . It must be understood, however, that the Reichsbank can work only in the framework of the total economic and social situation and cannot take unto itself the responsibility for existing legislation. . . . But, within these limits, it is its aim to place at the disposal of the economy means as abundant, as advantageous, as good, and as cheap as possible." [7] We shall see that abundant and cheap credit was not always compatible with advantageous and good credit and that the irreconcilable nature of the two sets of objectives forced the Reichsbank into many new forms of control.

The economic development of Germany proceeded from the low point of the stabilization with a wavy motion of ups and downs. The first two cyclical movements have been labelled the Rentenmark Cycle and the Dawes Loan Cycle,[8] and were phases of Germany's rebuilding. They were both connected with the monetary problems of stabilization. The rentenmark cycle worked upward to a high point in April 1924, and then down to a low point in July 1924; the Dawes Loan cycle began a slow upswing in the summer of 1924 and continued to a high point in January or February 1925, and thereafter downward to about May 1926. The third movement is more closely connected with the cyclical development in the rest of the world; there was a gradual improvement in business and a definite upturn from the middle of 1926 to the early months of 1928, when a slow retrogression set in which became cumulatively disastrous from September 1930 to the middle of 1932. Although some slight improvement appeared in the latter half of 1932, continued world depression, political upheavals, and foreign distrust combined to keep Germany in a state of depression.

7 *Die Reichsbank, op. cit.*, p. 145.

8 Blum, *Die Deutschen Kreditmarkte nach der Stabilisierung, op. cit.*

The Rentenmark Cycle

The substitution of 3.2 billion rentenmarks for 1.5 sextillion or more paper marks could not take place without violent repercussions on the whole German economy. The first result of stabilization was severe depression. Businesses were thrown into bankruptcy, unemployment increased, and prices dropped suddenly. The demand for working capital was reflected in the high money market interest rates. In January 1924, daily money and monthly money (the only types of funds dealt in on the bourse at that time) averaged 87.64% and 28.25% respectively.[9] The monthly rate was purely nominal since almost no loans for as long as one month were made. By March 1924, these two rates began to reflect more evenly the condition of the money market; the average for March was 33.09% for daily money, and 30% for monthly money.[10]

The Berlin Great Banks and the public banks were isolated from the Reichsbank. The normal relationship which made these banks dependent on the central bank as a place of last resort in times of monetary stringency was broken because the money market banks held no assets which were salable to the Reichsbank. The trade bill and the bank acceptance which had been the backbone of the German money market could not be reëstablished because the banks could not afford to tie up their limited capital for the length of time required and because the uncertain business situation made these loans unattractive. The Reichsbank itself granted direct acceptance credit to certain industries at the comparatively low rate of 10%, but its resources did not permit it to meet all of the legitimate demands from business—or even a substantial proportion of them. Foreign exchange, the second normal source of obtaining central bank support, was controlled completely by the Reichsbank.

The low point of the rentenmark deflation was reached in March 1924. During the latter part of March and the beginning

9 *Die Reichsbank, op. cit.*, p. 61.

10 *Ibid.*, p. 61.

of April there was a sharp increase in business activity and money market interest rates began to rise sharply. The average rates for daily and monthly money during April were 45.49% and 44.45% respectively.[11] The demands for foreign exchange increased rapidly so that by April 7, the Reichsbank was able to grant only 1% of the amount requested.[12] The discount and lombard loans of the Reichsbank and private note banks, which stood at 696.1 million rentenmarks on January 7, increased to 2,093.1 million on April 7, 1924.[13] Also, while theoretically the Reichsbank was the sole agency for foreign exchange, it was known that a well-developed "bootleg" market existed and that, within Germany, there were large hoarded reserves of foreign currencies. Currency stability, therefore, required a sharp curtailment of credit. The Reichsbank saw unhealthy tendencies in the money market, not the least of which was the speculative fever held over from the inflation years. Although stabilization had brought an increasing amount of unemployment and business failures, there were still many inflation industries anxious to retain, as long as possible, the profit advantage of a rapidly rising price level. There was a need felt by the Reichsbank for a "purification" of economic life.

The instigators and the main offenders in the rentenmark boom of March and April 1924 were the public banks, particularly the Seehandlung, the savings banks and Girozentralen, and the German postoffice. The source of funds was public money. The Seehandlung became the center of the short-term money business of the Berlin market. As was brought out in Chapter III, this bank had always been the leading money market bank in Germany and it was held in deep respect by the entire banking and business world. It had lost heavily in the inflation and subsequent stabilization and was anxious to recoup its losses. It built up its deposits more rapidly than other money

11 *Ibid.*, p. 61.
12 *Ibid.*, p. 62.
13 *Ibid.*, p. 62.

market banks because of its pre-war reputation, but it used these large funds in speculative loans against shares (which were still valued in terms of the old paper marks). It also loaned at high rates to other banks, particularly the specialized industrial banks which had multiplied rapidly during the inflation. These banks had financed themselves through the sale of stock of their own concerns when the inflation was at its height. With stabilization the stock market collapsed. Driven by a desperate need for working capital and the hope of high profits from a new boom, these industrial banks were willing to pay any amount of interest for short-term loans. The Seehandlung was not unwilling to lend. It also made heavy loans, at the daily money rate of interest, to industrial concerns such as Barmat-Kutisker and the Michael concerns.[14] The connections of the Seehandlung with the old banking house of E. von Stein (formerly connected with the *Disconto Gesellschaft*) led it to grant to this bank lombard loans covered by stock market collateral to a total amount of 7.2 million rentenmarks at the end of March 1924.[15] These funds were used for speculative dealings in paper marks. The postoffice held 100 million gold marks in postal check deposits at the beginning of 1924. Part of these funds it deposited in the Seehandlung but part it used in making direct loans to industry.

The Reichsbank was faced with two main tasks—the maintenance of stability of the rentenmark and the provision of cheap credit to legitimate trade and industry. In this emergency, the Bank resorted to the control policy of credit restriction and assumed the task of the qualitative guidance of funds into "desirable" channels.[16] The maximum amount of credit to be

14 Werner Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, 1924/1926* (Hamburg, 1927), pp. 38-40. The Seehandlung granted forty-five million rentenmarks to these two firms alone.

15 Heinicke, *Die Preussische Staatsbank, op. cit.*, p. 250. It was the failure of this firm and also of Barmat-Kutisker that led to the public investigation of the Seehandlung in May 1924.

16 See below, Chapter VII, for a discussion of the Reichsbank's inter-

granted by the central bank was fixed at its position on April 7, 1924 which amounted to a total of 1,997 million rentenmarks in bills, checks, and lombard loans.[17] The result was a complete stoppage of Reichsbank credits and, as the outstanding credits were repaid, the gradual reallotment of these funds to "desirable" businesses. Credit restriction implies this ability of the Reichsbank to evaluate the relative merits of different credit demands and to direct funds into specific channels selected as productive of total economic welfare. It is, thus, a qualitative credit device which must rest upon certain more basic assumptions as to what constitutes desirability. An analysis of credit restriction as one of the tools of credit control will be taken up in detail in Chapter X. Here, we are interested in pointing out the deep significance of this abandonment of quantitative control for qualitative control at a period when the Reichsbank was faced with the two irreconcilable objectives of maintaining currency stability and of providing cheap credit. It gave up neither—but assumed the right to choose and to limit the recipients of cheap credit.

The immediate results of the policy of credit restriction were further deflation and the end of the speculative boom. The goods price level sank, but the foreign exchange position of the Reichsbank was so much improved that by June 3, 1924 all of the requests for foreign exchange could be fulfilled 100%. This betterment in the foreign exchange position can be attributed, on the one hand, to the increased amounts of foreign exchange flowing into the bank as hoarded dollars and pounds began to be used for current expenses, and on the other hand, to the decrease in the requests for foreign exchange as business failures increased. Currency stability was undoubtedly achieved by the credit restriction policy of the Reichsbank; on the other hand, the bankruptcy statistics show a ruthless weeding out of

pretation of a "desirable" industry; see also, Chapter X for a discussion of credit restriction as a technique of central bank control.

17 *Die Reichsbank, op. cit.*, p. 63 f.n.

German industries. The bankruptcy filings were sixty-eight in March 1924, 133 in April, 322 in May, 579 in June, and 1173 in July;[18] in addition, many companies had gone into receivership. Just how many of these business failures represented the unstable inflation and speculative industries and how many of them were genuinely important to the economic life of the country it is, of course, impossible to say. It is probably true, however, that a large proportion of the failures was made up of the weaker concerns and that those that remained were forced to learn the bitter lesson of economy.

One other step toward "purification" was taken by the closing of the government loan offices on April 30, 1924. These were left over from the war period when they were organized to supplement the regular business of the banks. They had been one of the most disturbing elements in the inflation and, in the latter period, had issued their own currency. The issuing of currency had been stopped when the rentenmark was introduced, but they continued to carry on a lending business up to the date of their closing. The lombard loan business was thus sharply curtailed at the same time that restriction of bill credits was introduced and probably contributed to the general stringency in the money market. The lombard loan business of the Reichsbank had practically ceased because of the disorganization of the capital market. Securities in terms of the old mark were still in existence but were highly speculative because of the uncertainty of revaluation. Real value loans (*Sachwertanleihen*) in terms of rye and gold existed but were not admitted to the loan privilege by the Reichsbank until the late summer of 1924.

In contrast to these sharp deflationary policies, the establishment of the Gold Discount Bank by the Reichsbank in April 1924 was a positive step toward the rebuilding of the economy in the field of export credits. The purpose and organization of the Gold Discount Bank has already been discussed. The grant-

18 *Statistisches Jahrbuch für das Deutsche Reich, op. cit.*, 1925.

ing of export credits at 10% (well under the market rate) stimulated the export industries and at the same time relieved the Reichsbank of this credit responsibility and freed its available bill credits for other industries.

The low point of the Rentenmark cycle was reached in midsummer of 1924. The whole period must be looked upon as one of internal adjustment to the new era of currency stability accompanied by the enforced realization of the losses occasioned by inflation and the vital need for economy and rationalization.

The Dawes Loan Cycle, Summer 1924 to Spring 1926

The full extent of Germany's capital losses was yet to be realized. Germany had been cut off from the rest of the world for ten years and was completely out of touch with developments in foreign countries. The hope engendered by the success of the Dawes Committee was enough to produce the short upswing in business conditions that lasted for eight or nine months; the succeeding fifteen months of depression were the result of the repercussions in Germany of realignment with the world economy.

Germany found herself unable to compete successfully in world markets. Her plants were hopelessly out of date, the loose business organizations that had grown up during the war and inflation years were uneconomic. Few industries could borrow successfully in foreign markets. Her land was worn out for lack of fertilizer; her cattle were underfed and agriculture suffered from general capital scarcity and the necessity of borrowing at high rates in the short-term money market. High taxes gave a semblance of prosperity to the cities, the States, and the nation but at the expense of increasing business failures, unemployment and low living standards.

By midsummer of 1924, it became apparent that the proposals of the Dawes Committee had a fair possibility of being adopted by the allied powers. By August 16, the plan had actually been ratified by the nations concerned and was approved by Germany (not without a struggle in the Reichstag) on August 29. The Dawes Plan gave certain guarantees to Germany that were of deep significance. Most important, of course, was the guarantee of currency stability on a new gold basis and the emphasis placed upon the maintenance of stability through the guarantee that reparations payments were not to be permitted to interfere with the gold value of the reichsmark. At the time, this was the fact of central importance to the German people in the whole Dawes Plan, and was sufficient to outweigh the counsels of those who insisted that payments of the amounts demanded for reparations could be accomplished only through the breakdown of the German economy. The further provision of the plan for a gold loan to Germany of 800 million gold marks opened up the possibility of foreign credits to supply essential working capital.

The improvement of business in Germany from July 1924 to February 1925 was due largely to psychological factors incident to the adoption of the Dawes Plan. There was also real relief from a freer flow of credit and the opening of world markets.

The new Reichsbank law went into effect in October 1924, and the flotation of the Dawes Loan strengthened the gold and foreign exchange position of the Bank. Demands for foreign credits by German business men were at first only partially successful in foreign markets and only better known concerns were able to borrow long-term funds. The high interest rates in the German money market, however, soon began to attract short-term foreign capital. It is estimated that, by the end of 1924, one and one-half billion reichsmarks of foreign capital had been borrowed by Germany. The greater liquidity in the short-term money market and the improved gold and foreign exchange position of the Reichsbank served to lower open market interest rates, while the steady stream of goods imports had the effect of depressing the internal price level. The emphasis placed by the Reichsbank upon the export industries through the lowered interest rates of the Gold Discount Bank and its own credit rationing program strengthened the export trade; excess of imports over exports, however, amounted to 2.6 billion reichsmarks at the end of 1924.[19]

By February 1925, unhealthy signs began to appear in the German economy which worked toward a crisis heralded by the collapse of the huge Stinnes concern in midsummer. A period of deflation of extreme severity followed, persisting unabated until the spring of 1926. In general, the attitude of the Reichsbank toward this situation was one of aloofness; it held that the economic life was still in need of purification and reorganization and that the depression was an essential phase of post-inflation recovery. Credit restriction continued throughout 1925, began to be eased in the early part of 1926, and was wholly dispensed with in the early spring. The banks, following the lead of the Reichsbank, also held aloof from large commitments in industrial credits, and, in order to improve their cash position, called in many of their outstanding loans. Bankruptcy statistics show the results of this deflation policy.

TABLE XXIX. BANKRUPTCIES, 1925 THROUGH APRIL 1926[a]

1925, 1st quarter	2,210
2nd "	2,144
3rd "	2,402
4th "	4,057
1926, 1st "	5,643

[a] Great Britain, *Department of Overseas Trade, Economic and Financial Condition in Germany*, 1925-1926, p. 6, and 1927, p. 6.

If one compares the results of this second deflation with those of the first, from April to June 1924, one sees that, as reflected in the bankruptcy statistics, the deflation phase of the Dawes Loan cycle was much more severe than that of the rentenmark cycle. The short business upturn in the last six months of 1924 was a mild flurry caused by hope with no real

19 *Wirtschaft und Statistik*, 1925, Vol. V, p. 361.

basis in the economy to support it. The depression of 1925-1926 was inevitable as a part of the deflation of the currency and the deflationary policies of the central bank. No doubt, the credit restriction policy of the Reichsbank fell with greater weight upon the small and middle-sized firms. The larger firms of international reputation were able to borrow funds in foreign markets; they also had hidden surplus reserves which made them, to a certain extent, independent of Reichsbank credit; and the policy of the large credit banks was more lenient to their large customers than to their smaller ones. The whole economy, however, was dominated by the shortage of working capital. Under this pressure, and the renewed competition in foreign markets (made even more severe by the low value of the French franc), German industry in order to survive at all was forced into a program of radical reorganization. This was the beginning of the "rationalization" movement in Germany which became a fetish in the next few years. Rationalization, in this period, consisted largely of the reorganization of the sprawling combines that had grown up during the inflation period and the carrying through of new cartel agreements on a horizontal plane. It led to the wholesale closing of non-productive plants and to a reduction of labor force and personnel.

The government aided the process of rationalization by carrying out international cartel agreements wherever possible; by assisting domestic cartel formations through cheap grants from the *Reichs Kredit Gesellschaft* in the dyestuff trades, the shipping and air transportation industries, and the petroleum and steel industries. It also granted direct subsidies to certain important export industries such as iron and steel, potash and sulphates, and other subsidies to encourage domestic production of commodities generally imported in large amounts, such as motor tractors and ploughs, flax, starch, fertilizer, and the like. The total amount of direct subsidies in this latter group amounted to 225 millions of reichsmarks on June 1, 1926.[20]

20 *Wirtschaft und Statistik*, 1925-1926, p. 13.

In spite of its general attitude of non-interference with the liquidation of German industry and its enforcement of a tight money policy through restricted central bank credit, the Reichsbank took specific steps to rebuild the money market through the control of the two factors that interfered with its economy measures—public money and foreign loans.

The particular problems of the money market were: 1) to decrease the span between the Reichsbank rediscount rate and open market rates in order to relieve the Bank of the direct credit support of the entire economy; 2) to rebuild the private discount market; 3) to decrease the span between the interest paid by banks on creditor deposits and that charged by them for loans in order to encourage new capital formation; and 4) to reëstablish the inter-rate harmony between the money market and the capital market in order to encourage long-term borrowing. While all of these problems could not be solved until Germany had rebuilt her lost capital, they could be materially relieved by effective mobilization of available funds.

One of the main sources of money market funds in 1924 and 1925 was the reserve built up by public bodies from taxation. The public banks holding public money were the most important operators in the money market. The Reich at the beginning of 1924 levied high taxes in order to balance its budget. These taxes were levied on wealth, incomes, inheritance, on corporations, on goods turnover collected at each stage of the productive process from raw materials to finished products, on all capital transactions of business, on securities held by an investor as well as on all stock exchange transactions, on bills of exchange, on insurance policies, and the like. Although there was some agreement between the Reich and the States as to the collection and allocation of taxes, the States retained the right to tax on their own account, particularly landed property and house rents.[21] The municipalities levied heavy consumption

21 Prior to 1919, the federal States in Germany were autonomous bodies with full power of taxation in their own hands. The Reich levied customs duties, stamp taxes, and death duties throughout the country but, aside from

and luxury taxes such as taxes on beverages, on hotels and lodgings, on entertainments, on dogs, horses, and motor cars. There was also, in addition to the general turnover tax of the Reich, a trade tax levied in all States either by the districts, the municipalities or the States which was paid by the proprietor of the business on his gross profits and also on his capital or wage bill.

There were three aspects of this heavy taxation that held especial significance for the German economy. In the first place, high taxation was undoubtedly one of the reasons for the severe business depression in Germany throughout 1925 and the first five months of 1926. The taxes pressed heavily upon the impoverished population and the businesses that were struggling to survive in spite of dimished working capital and markets. During 1925, the government made an effort to reform the scattered system of national, State, and municipal taxes, but, because of bureaucratic opposition and deep-rooted political jealousies on the part of the several States, little headway was made until 1926. The full effect of these reforms was not felt until 1926-1927. In the second place, high taxes gave a false sense of prosperity to the public bodies. In a time that called for government economy of all sorts, cities maintained large personnel and began the building of expensive public works such as parks, swimming pools, schools, bridges, and the like. Some cities entered into industrial enterprises on their own account, bought land, organized banks which made loans

this, the States were free to manage their own financial affairs. In 1919, because of the large reparations burdens, the Reich took over a large portion of the right of taxation and in return agreed to allocate a portion of the amount collected to the various States. Because of deep political jealousies, no complete plan was worked out with the result that the Reich had the power to levy taxes but little authority to collect. Government economies and tax reforms were balked by new demands from the States. Although the government gained greater control over taxation from 1926 through 1932, it was never able completely to centralize tax authority in its own hands. This is one of the reforms that was carried through successfully by the National Socialists.

of doubtful security, and granted subsidies to private industries. Although the cities were the most flagrant examples of riotous public spending, the States and the national government were by no means free from the general tendency.

In so far as public spending is simply a transference from private spending, there is no objection to be made except on the debatable grounds of social and economic philosophy. One may object to public spending as less "economic" than private spending or as less productive to the total economic welfare, but these are value judgments passed on the basis of some preconceived attitude as to what constitutes economic welfare. As a matter of fact, a large part of the public spending in Germany was just such a transference. Private industry collapsed, public industries sprang up; labor was thrown out of private employment but was used in public projects. The real objection to public spending came from the belief that Germany was using labor and raw materials for projects that she could ill afford in the light of her actual poverty. High taxes gave public bodies a simulated prosperity but at the expense of legitimate trade and industry. This was the attitude of the Reichsbank and the basis of its objection to a decentralized and uncontrolled tax system. The Reichsbank maintained this attitude from March 1924, when it first conferred with the Reich Minister of Finance about the control of public funds and public spending, to the end of the decade. It carried over this belief in its attempt to check the borrowing of public bodies in foreign markets.

But, from the standpoint of the central bank, the third aspect of heavy decentralized taxation was the most important. This was the accumulation of large reserves of public funds in banks other than the Reichsbank and the use of these funds in short-term investments in the money market. To a certain extent, the accumulation of large reserves of public funds was unavoidable. The Reichsbank law of August 1924 prohibited the Bank from financing the Reich through the discounting of short-term treasury bills. The German government, therefore, was forced to maintain its entire burden of expenditures out of taxation built up in advance of spending. The Reichsbank desired to bring these public funds under its own control so as to mobilize them for use in rebuilding the German money market. According to the Reichsbank law of August 1924, it was not permitted to pay interest on deposits. Municipal banks, State banks and public banks, therefore, became the natural depositories for public money and only a small proportion of the total amount was kept with the Reichsbank in Giro accounts. Public money was scattered throughout the Reich in cities and States, and, in 1924 and 1925, there was no centralized Berlin money market to serve as the necessary integrating factor. The Reichsbank had given up its position as a banker's bank through its credit restriction policy; its discount rate, therefore, could not be looked upon as a means of control over the total flow of funds to the money market. This evil of scattered cash the Reichsbank set itself to remedy with no traditional tools at its disposal. Its main tool was moral suasion backed by effective bargaining. The actual steps taken by the Reichsbank to bring public funds under its own control will be discussed in detail in Chapter IX.

Foreign loans were another source of funds that served to bring a certain amount of liquidity to the German money market. Although foreign confidence in the stability of the reichsmark had been established when the Dawes Loan was put into effect, the sudden onrush of long-term capital demands from German business men had not met with immediate response from foreign investors. The collapse of the huge and well-known Stinnes concern in July of 1925 disturbed foreign faith in the stability of German business to pay dividends for a long time to come. High interest rates in the Berlin money market were tempting to short-term capital, however, which began to come in in large amounts. The Reichsbank's attitude toward foreign loans was one of discouragement of all borrowing that did not go directly into productive employment—especially to the increase of exports.[22] Within this broad objective, it tried to limit short-term loans and to encourage long-term loans, and throughout the years from 1924 to 1929 it aided every effort to convert short-term loans into long-term loans; furthermore, it frowned upon all foreign borrowing, long and short, carried on by public bodies.

Foreign credits were, however, essential to rebuild the German economy. The excessive demand was the result of real captial losses which had to be made up by foreign borrowing if Germany was to regain its place in the world economy. Foreign loans were the central problem of the Reichsbank throughout the entire period under discussion. In fact, as Dr. Schacht stated to the German Bank Committee in 1929, " A normally functioning currency is in the long run impossible unless the national economy has reached a financial balance. If balance is maintained by foreign credits, a central bank is *unfree* . . . This dependence of the German currency upon foreign countries made the problem of foreign credits the central factor in Reichsbank policy." [23] The German economy was far from a balanced economy; it was at all times dependent upon foreign funds which not only made central banking policy " unfree " but also controlled the basic structural development of the country and forced it to react quickly and disastrously to any check in the free flow of foreign capital. This was apparent in the first two years of rebuilding but became even more serious when a sufficient degree of revival had set in to bring the long-term capital demands of the economy to the forefront. The most immediate needs in the post-inflation period were for short-term funds for working capital purposes and it was short-term borrowing that constituted the largest source of funds during

22 In relationship to foreign loans the Reichbank used the word *productive* to mean either those loans that were used directly by export industries for the importation of raw materials, or those loans that indirectly encouraged exports and discouraged imports. In connection with home industry, the word productive seems to have meant simply non-luxurious expenditure. See below, Chapter VII.

23 *Die Reichsbank, op. cit.*, p. 135 and p. 153.

the years covered by the Dawes Loan cycle. Although long-term borrowing occurred during this period, the real capital demand made itself felt in the later years of revival and prosperity.

Definite limits to the Reichsbank's ability to control foreign borrowing were set by its function as a central bank entrusted with the prime task of guaranteeing the stability of the currency. The Reichsbank's refusal to buy and sell gold and foreign exchange would have meant a threat to the currency, avoidance of which was always the first consideration of the Bank. However, in the year 1925, the government, at the instigation of the Reichsbank, established an advisory bureau (*Beratungstelle*) to pass on all foreign loans requested by public bodies. This bureau had no control over private borrowing and no control over public short-term borrowing, except in the case of villages and village associations.[24] While the Reichsbank was a member of the committee, and no doubt an influential member, its decided attitude toward foreign borrowing was not held by all of the committee. The influence of the Reichsbank in the *Beratungstelle* was at best indirect. In spite of the attitude of the Reichsbank and the activities of the *Beratungstelle,* foreign funds came into Germany in increasing amounts and influenced, at all times, the control policies of the central bank.

A third source of capital available for the rebuilding of the German money and capital markets was domestic savings. These were small in the years 1924 and 1925 compared to public funds and foreign loans, but amounted to about 3.03 billion reichsmarks at the end of 1925.[25] Bank credit creation, a fourth source of money market funds was, as we have seen,

24 For a complete discussion of the activities of the *Beratungstelle,* see below, Chapter XI.

25 Estimated by Dr. Carl Teewaaj, manager of the Central Association of German Banks and Bankers, on the basis of new savings, increase in the premium reserve of savings banks, and in domestic long-term investment in interest-bearing securities. *Die Zerrüttung des Geld- und Kapitalmärktes. Untersuchung des Bankwesens, op. cit.,* Part I, Vol. I, p. 549.

limited. Unfortunately, comparative statistics on the relative importance of these four sources of money market funds for this period are not available. The total amount of German bank deposits, long and short-term, amounted at the end of 1925 to 14,740 million reichsmarks.[26] This figure includes public money, foreign deposits, savings, and bank deposits arising out of bank loans. It excludes interbank deposits. Of this amount, only 457 million reichsmarks represent customers' loans (*Kundschaftkredite*), 241 million reichsmarks represent long-term bank loans, which may or may not be included as customer loans; savings deposits account for 2,401 million reichsmarks.[27] Presumably, therefore, the remainder, 11,641 million reichsmarks, represents public money on deposit with German banks plus foreign deposits. No figures were ever published by the German banks on the total amount of their foreign deposits. The first estimate was made by the Wiggin committee in August 1931, and revised by the second Basle committee in December of the same year.[28] Until the publication of the improved balance sheets in 1928, public money on deposit was lumped with all other deposits. It seems probable, however, that at the end of the year 1925 more than half of the total amount of 11,641 million reichsmarks represented public money.

If one examines the state of the German money market at the beginning of July 1924 and at the end of the Dawes Loan cycle, one finds that it had made long strides toward readjustment of interrate relationships.[29] Open market rates for daily and monthly money decreased from an average of 16.83% and 22.92% respectively in July 1924 to an average of 4.80% and 5.93% in May 1926. There was thus not only an absolute

26 *Untersuchung des Bankwesens, op. cit.*, Part II, p. 135.

27 The difference in this figure and the one given above is accounted for by the inclusion in the larger figure of direct investment of the public in long-term securities.

28 See, however, pp. 152-155.

29 *Die Reichsbank, op. cit.*, p. 61.

decrease in the cost of short-term credit, but also the span between daily and monthly money was more nearly in line with its pre-war position. The difference in cost was 6.09% in July 1924 and only 1.13% in May 1926. The Reichsbank rediscount rate was reduced from 10% to 9% on February 25, 1925, to 8% on January 12, 1926, to 7% on March 27, and to 6% on July 7.[30] By the middle of 1926, therefore, bank rate had regained its leading position in the money market. The bill market showed surprising development from December 1925 to June 1926, in spite of the fact that the German economy was seriously depressed and that the total turnover of bills was considerably less than in 1913. Open market trading in private discounts was begun in December 1924.[31] The rates for bank acceptances decreased steadily from 9.2% to an average of 4.69% for May 1926,[32] while total holdings of the six Berlin Great Banks of bank acceptances and checks increased from twenty-three million reichsmarks in December 1924 to 243 million at the end of April 1926.[33]

Dealings in bank-guaranteed trade bills also increased, while rates decreased. Amounts of such bills held in the portfolios of the six Berlin Great Banks were 887 million reichsmarks on December 31, 1924 and 1,383 million reichsmarks at the end of April 1926;[34] the rates in the open market had decreased in the same time from 8.94% to 5.8%.

The market for bank credit showed the same improvement. Customer rates for bank loans were from 15 to 16½% in January 1925 and 10.4% at the end of March 1926,[35] while the

30 *Die Reichsbank, op. cit.*, p. 61.

31 It will be remembered that private discounts were the backbone of the German money market in the pre-war period. They are comparable to prime bankers bills in the London and New York markets. See above, Chapter IV, p. 143.

32 *Die Reichsbank, op. cit.*. p. 61.

33 Blum, *Die Deutschen Kreditmärkte nach der Stabilisierung, op. cit.*, p. 118.

34 *Ibid.*

35 Great Britain, *Department of Overseas Trade, op. cit.*, 1925-1926, p. 9.

amount of indebtedness carried for customers in current accounts by six Berlin Great Banks grew from 1,550 million reichsmarks at the end of December 1924, to 2,454 million at the end of March 1926.[36]

In short, the end of the "purification" process found Germany in a much healthier condition than she had been since the inflation. The means adopted to achieve the end had been drastic, but by the middle of 1926 the German economy began to show signs of the marvelous recuperative powers which mark her as outstanding among the nations in the decade 1924-33. Her currency had remained stable for two years and foreign confidence was established. Her industries had been consolidated and refashioned into efficient productive units and were on the verge of that modernization and rationalization which characterized German business for the next two years. Her internal tax burden had been decreased in 1925 and was undergoing a process of more complete reform. Domestic savings were increasing. The money market had been rebuilt so that open market rates again stood in harmony with each other. The total cost of short-term credit had decreased. And the trade balance from January to June 1926 showed, for the first time, an excess of exports over imports of 539.7 million reichsmarks.[37]

On the other hand, the capital market had not revived and there was an unhealthy development in the financing of long-term needs with short-term loans. The economy was dependent on foreign loans for any advance that it might make. Unemployment had reached the two million mark and over. Agriculture was severely depressed because of crop failures in 1925 together with the necessity of forced sales of the crop due to lack of credits. Although the trade balance had been favorable in the first half of 1926, this was almost wholly due to a decrease in imports which was a reflection of the lowered stand-

36 Blum, *Die Deutschen Kreditmärkte nach der Stabilisierung, op. cit.*, p. 118.

37 Great Britain, *Department of Overseas Trade, op. cit.*, 1925-1926, p. 32.

ard of living and of the depression, while the value of exports remained disappointingly stable. And, more basically, the German economy was faced with the necessity of increasing production beyond the pre-war figures to provide for the loss of income formerly derived from investments abroad (amounting to about one billion reichsmarks), to pay reparations which were to increase from 1.2 billion reichsmarks in 1926 to 2.5 billion in 1928, and to allow her to compete successfully in foreign markets. Further, the domestic market could not absorb the pre-war volume of production, let alone the increased volume demanded.[38] In spite of the doubtful nature of the basic structure of the German economy, revival began slowly to set in and relative prosperity was achieved in 1927 and 1928.

Recovery, Prosperity and Stagnation—Spring of 1926 to the End of 1928.

The factors leading to the prosperity of the year 1927 were both external and internal. The British coal strike in the summer of 1926 gave an impetus to the German coal industry which was sufficient to stimulate related trades and to reduce the surplus stocks which had piled up during the depression. After the British strike was over, German industry found itself in a position secure enough to maintain the advantage it had won. Then too, the stabilization of the French franc put an end to French dumping in foreign markets and made German competition more successful. The reorganization that had taken place in industry bore fruit in lowered costs of production and, taking advantage of the rising cycle movement in the rest of the world, German producers were able to sell their goods at more favorable prices in foreign markets. Foreign relations were full of confidence. The obligations under the Dawes Plan had been met promptly and in full; Germany had carried out several favorable trade treaties and was showing

38 Reichs Kredit Gesellschaft, *German Economic Development*, latter half of 1926.

herself capable of a vigorous will to adjust herself to the post-war world economy.

The internal factors supporting the revival in business were 1) the reorganized German money market, 2) the increase in domestic capital accumulation, and 3) the credit policy of the Reichsbank. The reëstablishment of the inter-rate harmony in the money market was a boon to industry and the low rates prevalent in the year 1926 meant that credits could be obtained at prices favorable to profits. The spread between domestic and foreign short-term rates was decreased to such an extent that it became possible for a large portion of foreign short-term credits to be consolidated into long-term loans. For the first time since stabilization, the domestic capital market was able to absorb bond issues in increasing amounts and, although the yield on German bonds was still considerably higher than that on foreign bonds, the German market drew nearer to the foreign capital market. The Reichsbank abandoned its policy of credit restriction early in 1926 and relied thereafter on its discount rate as a means of control. Its easy credit policy be-

TABLE XXX. BUSINESS DIFFICULTIES, 1925–1929 [a]

Year	Bank-ruptcies	Receiver-ships and creditor agreements	Bills protested by banks		
			Number	Amount in million Rm.	Ratio of protests to bills drawn
	Monthly average				
1913	815	—	—	—	—
1925	932	492	15,120	23.6	6.36
1926	1,023	653	9,991	13.2	3.91
1927	472	109	4,607	6.0	1.71
1928	665	266	7,174	9.5	2.03
1929	821	407	8,730	12.0	2.77

[a] Reichs Kredit Gesellschaft, *German Economic Development*, latter half of 1930, p. 29.

gan with the reduction of bank rate in progressive stages from 9% in January 1926 to 6% in July 1926; this was followed by a further decrease to 5% on January 12, 1927.

The improvement in the general situation is shown in the decrease in bankruptcies and unemployment. The year 1927 shows a marked drop in bankruptcies, receiverships and bills protested, and, although there was an increase in 1928 over 1927, the figures were still well under those of 1926. By 1929 the country was once more entering a period of depression.

The number of recipients of full unemployment relief averaged 1,749,000 in 1926 and 1,360,000 in 1927. By 1928 the figure had risen to 1,830,000, and by 1929 to 1,985,000.[39] The improvement in 1927 is comparatively small, but important, nevertheless. It had become increasingly apparent after stabilization that Germany had a technological unemployment problem to solve. The ability of industry to absorb labor was limited by efforts to modernize equipment and to rationalize organization so as to decrease labor expenses as far as possible. The production index of the *Reichs Kredit Gesellschaft* constructed as an index number with average monthly production in 1929 as 100, shows the following rapid development:[40]

1925	81.8
1926	77.6
1927	98.4
1928	98.3

From a low point of 77.6% in 1926, the index number jumped to an average of 98.4% in 1927, and increased by only one-tenth of one percent in 1928. These were the years when German manufacturers, supported by a better-organized money and

39 Reichs Kredit Gesellschaft, *German Economic Development*, latter half of 1930, p. 13. It is customary in Germany to double this figure in order to arrive at an estimate of the total number of unemployed. The restrictions of the unemployment insurance benefit law tended to make laborers delay registration as long as possible.

40 *Ibid.*, p. 3.

capital market, borrowed heavily in order to bring their machinery up to date and to modernize their plants.

In general, the Reichsbank adopted an easy money policy from the beginning of 1926 to the spring of 1927. Reichsbank policy together with foreign loans made the money market extremely liquid and no doubt supported the rising business cycle. The revival of business in Germany and increasing business profits stimulated the capital market. For the first time since the inflation, the span between long-term interest rates and open market short-term rates tended to decrease. To some extent, the decreasing rate for long-term loans was due to the revival of the interest of investors in long-term investments. At the end of 1926, domestic purchases of new long-term securities amounted to 3,435 million reichsmarks and foreign purchases to 1,579 million reichsmarks, or a total of 5,014 million reichsmarks as compared to 2,261 million at the end of 1925.[41] However, to a very large extent, the improvement in the capital market was definitely related to the increase in share prices brought about by the extreme liquidity of the short-term market. The market for new shares as well as the market for the old shares was stimulated by the increase in bourse report and lombard loans. The money market banks found it possible to sell substantial amounts of new shares in the capital market for the first time since stabilization. New issues of shares amounted to 898 million reichsmarks in 1926, 1,368 million in 1927, and 1,321 million reichsmarks in 1928.[42]

The Reichsbank, in an effort to decrease foreign short-term funds in the Berlin market, lowered its discount rate on January 1, 1927. For five weeks there was a noticeable falling off of foreign loans, but the stock market boom in Germany continued. Foreign speculators, tempted by the high profit in the stock market, began to send funds into Germany in increasing amounts. The stock exchange index number of the *Reichs*

41 *Die Reichsbank, op. cit.,* p. 86.

42 Reichs Kredit Gesellschaft, *German Economic Development,* first half of 1929, p. 24.

Kredit Gesellschaft, computed with January 2, 1925 as the base of 100, shows the following development from January through June 1927:[43]

January	(monthly average)	149.1	
February	"	156.6	
March	"	153.0	
April	"	166.7	
May 3		178.1	
May 9		166.0	
May 13		139.1	(Black Friday)
May 31		130.7	
June	(monthly average)	138.7	

The Reichsbank watched this speculative trend of the stock market with concern. Although foreign funds were responsible for bolstering the bourse, German banks were becoming heavily involved in stock market loans and were depending upon the Reichsbank for rediscount credits and lombard loans. The gold and foreign exchange held by the Reichsbank decreased from 2,255.8 million reichsmarks on January 31, 1927 to 2,020.8 million on April 30, while, during the same period, its domestic bill credits increased from 1,415 million reichsmarks to 2,067.5 million.[44] An increase of the discount rate was considered inadvisable because it would aggravate the very difficulty which was partially responsible for the situation—the increase of foreign funds. On the 11th of May 1927, therefore, the president of the Reichsbank called in the members of the Berlin Bankers Association (*Stempelvereinigung*) and announced to them that, in the future, the proportion of discount credit that they could expect from the Reichsbank would depend upon the relationship of their own liquid reserves (cash and Giro deposits) to their total liabilities. The Reichsbank specified no objective for cash liquidity but indicated in no uncertain terms that the average liquidity of 2.8% of the six Berlin Great Banks on April 30, 1927 was far too low. Further, the Reichs-

43 Reichs Kredit Gesellschaft, *German Economic Development*, second half of 1927, p. 21.

44 *Ibid.*, p. 18.

bank warned them that if these measures did not lead to an improved general situation it would once more resort to credit restriction as a means of control.[45] On the morning of May 13, the Association issued the following proclamation: "The members of the Berlin Association of Banks and Bankers have agreed among themselves to reduce, gradually but radically, their report and lombard loans and all other loans secured by shares. They will accordingly reduce their bourse report and forward exchange business by 25% by the middle of June and will further limit their loans for the following month. Their customer loans against securities will in the same manner be reduced. Cooperation with this decision of the Association is expected from other money lenders."[46] This "surprising" proclamation (surprising to the market) produced the famous Black Friday which will long be remembered in Germany's stock exchange history. Speculators were caught, report money jumped to 25% per month, stock prices dropped from their index number of 166.0 in a single day to 139.1 and by the end of the month to 130.7. The action of the Reichsbank as a control measure, we shall discuss in more detail in a later chapter. It should be pointed out here, however, that the Reichsbank had demanded from the banks only greater liquidity. It was the *Stempelvereinigung* that took collective action in deciding to reduce bourse report and lombard loans of the money market banks. The banks, of course, could not become more liquid without selling some of their investments; that that sale fell more heavily upon stock market loans was probably due to the fact that it was in these loans that the banks were greatly over-extended. One other immediate result of the banks' efforts to put their affairs in a more liquid position was their rapid repayment of foreign short-term loans. Although the stock market remained depressed and pessimistic to the end of the year, German business continued to expand.

45 *Die Reichsbank, op. cit.*, pp. 67 and 200-209.

46 *Ibid.*, p. 68.

Although the period from the middle of 1926 to the end of 1928 is looked upon as one of industrial advance, certain basic factors in the German economy were unsound. These were (1) the depressed condition of agriculture, (2) the strain on the capital market, and (3) the trade balance. These problems were never lost sight of by the Reichsbank and it was constantly occupied in devising means to improve the foundations of the economic system as well as to control the flow of funds in the money market.

There is an old saying in Germany that "when the farmer has wealth, the whole world is in health." [47] German agriculture had been in a continued state of depression since the stabilization of the currency. Inflation, to be sure, had wiped out a large portion of the existing agricultural debt, but the rentenmark currency had been based partly on a levy on agricultural wealth, which again burdened land with debt. Agriculture, together with the rest of the economy, suffered from the post-inflation scarcity of working capital. Agriculture had been accustomed to borrow its long-term capital on the basis of the agricultural mortgage bond issued on pooled mortgages on land. These bonds bore comparatively low rates of interest but were widely purchased by German investors because of their safety. The lack of a capital market deprived agriculture of this type of finance, and the type of bond was unknown to foreign investors and therefore not attractive. The coöperative banks had formerly supplied working capital, but their own funds were almost wiped out by the inflation and they were helpless in the early years to relieve the situation. Capital could only be secured in the short-term capital markets at high rates of interest and short-term borrowing for agricultural finance is always particularly disastrous. The Reichsbank could do little to supply needed funds to agriculture until some organization had been brought into the money market. In the years

47 "*Hat der Bauer Geld, hat's die ganze Welt.*"

1926 to 1928, however, it set itself seriously to the task of improving the credit position of the farmer.

In 1926, the Reichsbank declared itself ready to finance the harvest by granting the rediscount privilege to six-month agricultural bills. Loans were granted to farmers by the coöperative banks on the basis of harvest estimates; these agricultural bills were then rediscounted with the *Preussenkasse*. The Reichsbank arranged with the *Preussenkasse* to rediscount these bills up to any amount that was necessary, but it was actually called upon to take over only a small number.[48] Also, in the same year, the Reichsbank used the Gold Discount Bank for the improvement of both short-term and long-term agricultural finance. The Gold Discount Bank granted lombard credits to the coöperative banks to the amount of eighty-five million reichsmarks to permit them to broaden their agricultural loans. Also, it was during this year that the three-cornered transactions between the *Rentenbankkreditanstalt*, the Gold Discount Bank, and the Reichsbank took place. Seven percent promissory notes were issued by the *Rentenbankkreditanstalt* and sold to the Gold Discount Bank (100 million reichsmarks) and granted the rediscount privilege by the Reichsbank. The proceeds of this loan were used by the *Rentenbankkreditanstalt* in long-term loans to agriculture.

By the end of 1928, the grain harvest, through improved methods and fertilization, had increased the total yield of bread grain from about nine million tons in 1926 to twelve and one-half million in 1928 (average for 1911 to 1913 was thirteen and four-fifths million tons).[49] The general situation of the farmer was thus improved, although he felt the effects of higher prices for consumption goods which increased the spread between the prices that he must pay for commodities and those received for his crop. The credit position was relieved through

48 *Reichsbank Annual Report*, 1926.

49 Reichs Kredit Gesellschaft, *German Economic Development*, second half of 1928, p. 6. The 1911-1913 average is based upon the present territory of the Reich in order to give comparable statistics.

the increase in domestic capital accumulation and the improved rediscount facilities for agricultural paper provided by the Reichsbank. The activities of the Reichsbank in the general capital market had broadened the sale of agricultural mortgage bonds in spite of the fact that the tension in German capital markets remained unchecked.

The problem of the provision of long-term capital for the German economy was submerged in the first two years after stabilization in the immediate task of reconstruction and rebuilding. The most pressing need was then for working capital to start the whole of industry moving again. The demands of an economy for long-term funds are a sign of growth which could only appear in Germany after the main task of reorganization had been accomplished. By 1927, industry was ready for expansion and the long-term capital demands multiplied more rapidly than the domestic capital supply. The fact that the average minimum yield on German bonds increased from 6.83% in January 1927 to 8.23% in December 1928,[50] is a measure of the peculiar scarcity of long-term capital. It is, of course, no part of the task of the central bank to provide an industrial system with long-term capital. Its primary purpose is to provide for the short-term credit needs of the commercial banking system in order to keep the flow of goods in relation to the flow of money. There is no hard-and-fast line, however, that can be drawn between the capital market and the money market — the rates in the one affect the rates in the other; any sharp strain in the capital market—especially in so far as it leads to increased borrowing in foreign markets—is bound to react upon the currency itself.

The Reichsbank had at its command only limited means to aid in the rebuilding of the capital market. It consistently purchased mortgage bonds in the open market for the permanent investment of its pension fund. Through the Gold Discount Bank purchases of long-term securities it further broadened

50 Reichs Kredit Gesellschaft, *German Economic Development*, second half of 1928, p. 25.

the market. The lombard privilege was extended to more and more securities and the time limit on lombard loans and on stock exchange collateral of less than 50,000 reichsmarks was increased by the end of 1928 to its legal maximum of three months. The Reichsbank aided in the formation of a bank consortium to underwrite Reich loans so that (as required by law) these bonds could be opened to the lombard privilege. But the central problem of control over the demand and supply of long-term capital remained out of reach of the Reichsbank. The capital demand was deeply rooted in the post-war structure of the German economy. The demand was unnecessarily intensified through issues of public loans, a large portion of which could not be considered "legitimate", since they were for the purpose of balancing budgets over-loaded with non-productive expenditures. In spite of this, essential industrial growth created demands that far outran the supply. It must be remembered that a large portion of the domestic savings of Germany was absorbed each year in reparations payments (2.5 billion reichsmarks in 1928). Or, to put it more accurately, high taxes to pay reparations interfered with free saving. The German economy was, therefore, increasingly dependent upon foreign borrowing to sustain a normal rate of growth and could be expected to remain dependent for many years to come.

The Reichsbank, in its position as the central bank, was the source of supply of the foreign exchange essential for interest and service charges on foreign loans. The stability of the currency depended upon its ability to meet foreign exchange demands easily and promptly. Its own gold and foreign exchange policy was dependent upon the flow of foreign funds, while, as was pointed out in Chapter IV, its discount rate was to a large extent "unfree" on this account. Nevertheless, it was the deeper significance of foreign borrowing to the German economy that disturbed the Reichsbank. It was deeply concerned by the fact that Germany's trade balance remained obstinately unfavorable and that, in the last analysis, all foreign borrowing that could not be paid for out of a surplus of exports over imports had to be considered undesirable. In the five years 1924 through 1928 Germany's trade balance had been favorable only once, and that by only nineteen million reichsmarks in 1926. In 1924, imports exceeded exports by 171 million reichsmarks; in 1925, by 240 million; in 1927, by 285 million; and in 1928, by 155 million reichsmarks.[51] It is not our purpose here to go into an extensive analysis of the foreign trade of Germany. The problem has been widely discussed in the last few years and everyone is more or less familiar with Germany's contention that only through the wider sale of her goods abroad can she acquire a sufficient amount of foreign exchange to pay her existing debts. It is sufficient to point out, once more, that foreign borrowing and foreign trade go hand-in-hand and that, in the pre-war economy, the arguments justifying extensive foreign loans rested upon the assumption that the flow of trade would be unhampered by impeding restrictions. The consequences of heavy borrowing and lending operations carried on in the face of increasing trade restrictions are now well understood. They were understood by the Reichsbank, and never lost sight of from 1925 to the present time. There is no annual report published that does not contain the constant warning, and by 1928 there is a helpless note in its statement, "Once more in the past year the reparation payments have been made, not out of economic surpluses but out of borrowed money, and the problem becomes increasingly grave to what extent the present rate of incurring debt can be maintained and how long the German economy can go on supporting credit terms which have become, during the year, more and more unfavorable to the borrower. . . . The more urgent and more important point is whether this foreign indebtedness is calculated now and in the future to help produce export surpluses sufficient,

51 Reichs-Kredit-Gesellschaft, *German Economic Development*, first half of 1929, p. 15. These figures exclude the deliveries in kind on reparations account.

not merely to enable Germany to meet the interest on what she has borrowed (the total required annually is estimated to be already in the neighborhood of 1 billion reichsmarks), but, in addition, to pay the annuities under the Experts' Plan." [52]

That credit terms had become more and more unfavorable was the result of Germany's own capital needs for expansion and growth. Domestic savings were inadequate to meet the demand. Foreign borrowings were depended upon to supply the deficiency, but foreign loans could only be repaid out of an export surplus. Foreign markets were increasingly difficult to secure because of trade barriers everywhere in the world. A vicious circle! Germany had made long strides toward rebuilding her shattered post-war economy in the past five years. Although some further internal progress could be made, it was becoming increasingly obvious that the basic difficulties were international in character and were both political and economic. The way out for Germany could no longer be through compromise; it could come through world recognition of the necessity for international cooperation, made practically operative on the basis of working agreements, or it could come through abandonment of all hope of international economic harmony.

52 *Annual Report of the Reichsbank*, 1928, pp. 3 and 6.

CHAPTER VI

THE REICHSBANK AND GERMANY'S ECONOMIC DEVELOPMENT

1929-1933

THE standstill in German business, apparent in the year 1928, developed into depression in 1929 which continued practically unabated to the end of the period under discussion. Germany's economic history—together with that of the rest of the world—is, therefore, for the next five years, one of decreasing production, increasing unemployment, business failures and lowered standards of living. The dependence of the German economy on foreign markets and foreign loans made her peculiarly sensitive to world economic conditions, and gradually produced the feeling that control over her internal economic situation rested, not in her own hands, but in the decisions of foreign governments. The linked questions of trade, transfer, reparations, and foreign loans, which had to be solved if the German nation was to maintain itself, were unfortunately all international political problems. And the diplomatic conference table is admittedly incapable of meeting squarely the hard impact of economic fact. Under pressure of world depression, the thin veneer of international harmony crumbled. In Germany, in bold relief, one sees the effects of international political compromises lagging by at least three years behind economic necessity. The hope for foreign understanding with which Germany entered into the Young Conference in Paris in 1929 had, by 1933, shifted to a complete withdrawal from international political entanglements and the frank avowal of the belief that " through our own efforts only will come national salvation." Between these two dates lies the history of collapsing world confidence, a collapse which pressed with excessive severity on the German nation because its reconstruction in the previous five years had been based upon foreign support. The continued good will of foreign nations as evidenced both by continued economic support and by political concessions was vital to the further development of the German nation as a free democracy.

Depression and Political Tension

The June 1928 report of the Agent General for Reparations, Mr. S. Parker Gilbert, called the attention of foreign governments to the uncertainties existing under the Dawes Plan and stated that, in his opinion, the general situation in Germany would be improved if final action were taken to fix the full amount of reparations payments and to relieve Germany of the burden of foreign control and foreign occupation of the Rhineland, which were leading to intense political unrest. He pointed out that future progress in Germany depended upon the solution of the problem of the trade balance and the development of long-term capital investments for productive ends. There was undoubtedly in this report the implied argument that Germany's affairs could no longer be considered from the domestic angle alone, but that currency stabilization and further internal strength depended upon foreign action in regard to the basic problems that were disturbing the German economy. In accordance with the recommendations of Mr. Gilbert, the Young Conference was convened in Paris in the spring of 1929.

It soon became apparent that the spirit of cooperation which had dominated the Dawes Conference five years previously could not be relied upon a second time. The economic issues at stake in 1924 were more frankly expressed than in 1929. Then, Germany was no potential competitor in foreign markets—she was completely crushed; then, it was evident that, unless she were permitted a breathing space in which to rebuild her economic structure and provided with funds to carry out the process of reconstruction, she would be unable to pay reparations. In 1924, foreign nations were faced with the political necessity of collecting reparations and the economic necessity of assisting Germany to get back on her own feet; in solution, the two problems became one — out of the latter would come the former.

In 1929 the issues were not so simple. Germany had demonstrated to the world her marvelous recuperative capacity. She had become an actual competitor in foreign markets and had geared her whole economy to the development of the export industries so that at any moment she could take advantage of new opportunities. Moreover, the reparations question was linked with the further expansion of Germany's export trade so that the economic issue became, frankly, one of more trade concessions plus reparations, or no reparations and no markets. The purely economic situation was even more complicated, however, by the presence in Germany of large amounts of long and short-term foreign funds. The creditor nations—particularly the United States—had an interest in maintaining the credit stability of the German nation in order to protect their own investments; these were endangered by the size of the reparation burden and the increasing nationalistic stumbling-blocks to world trade in the form of tariffs, quotas, and the like. In spite of their firm stand on currency stability for Germany, the creditor nations were unwilling to make either reparation or trade concessions. In case of bargaining pressure, however, they were more willing to make sacrifices in regard to the size of reparation annuities than to guarantee tariff reduction.

Germany, on the other hand, had a very clear economic case. Reparations had been paid in the past very largely out of foreign loans. To continue to borrow in order to pay was possible only if she could foresee a guaranteed improvement in her trade balance. Politically, however, the maintenance of international prestige was important to Germany. National pride had received a severe blow in the loss of the war and the humiliating terms of the Treaty of Versailles. The question of war guilt—the theory upon which the peace treaty was based—was being violently attacked by parties in opposition to the government in power. The presence of French troops in the Rhineland was a source of irritation which daily disturbed internal and external harmony. Germany was ready to sacrifice economic considerations in order to gain recognition from the world of her national sovereignty.

The result of this interplay of political and economic motives of world states was the Young Plan—one of the most disastrous compromises of the post-war world. The conference was marked from first to last by a spirit of bickering and distrust. Open bargaining was the only method through which anything could be accomplished and, time and again, the conference was on the verge of collapse. In Germany, this produced a state of nervousness and nationalism—typical economic and political reactions to the uncertainties of internationalism whose foundations seemed to be built upon the sand. German business had been at a standstill for the preceding eight or ten months; under the impetus of the Young Conference stagnation turned unmistakably into depression. Germany was too vulnerable to withstand any disturbance in the flow of foreign funds.

Early in 1929, the gold and foreign exchange position of the Reichsbank was strong enough to permit of a reduction in discount rate from 7% to 6½%. During the months of February and March, however, there was a notable diminution in the flow of money to Germany, due to the counter attraction of the high interest rates in the New York stock market; and there was an attraction even for German funds in New York. Suddenly, in April, there began a rapid withdrawal of foreign short-term money from Germany which reduced the gold and foreign exchange coverage from 64.4% in January 1929, to 50.9% on April 25.[1] The Reichsbank increased its discount rate to 7½% but the withdrawals continued and, by the end of the first week in May, the note coverage had reached the dangerous point of 41%. The Reichsbank was forced to re-introduce the policy of credit restriction in order

1 *Reichsbank Annual Report*, 1929.

to protect the stability of the currency, but credit restriction, in a period of business decline, together with the general feeling of uncertainty, worked immediate hardship on productive activity and precipitated the depression.

It is difficult to account for the sudden withdrawals of foreign funds from Germany during the critical stages of the reparations negotiations in Paris. Dr. Schacht, the president of the Reichsbank, and the head of the German delegation at Paris, has blamed the "attack" on the German currency on the French politicians, who were evidently acting upon the assumption that the mere threat of monetary instability in Germany would be sufficient to bring the German delegates to terms. After mentioning the fact of the withdrawals during the early stages of the conference, and the increased tempo throughout April, which led to the increase of the discount rate on April 25, Dr. Schacht continues, "The previous day something occurred in Paris which was without precedent in the modern international history of currency. In clear connection with a meeting of the Transfer Committee which was held in Paris on April 25, 1929, with the Agent General for Reparations in the chair, reports were sent to the press (not by the Agent General) which were consciously and deliberately intended to, and did, provoke violent attacks upon the German currency in a series of Paris newspapers, and led to an attempt to discredit the policy of the Reichsbank. Simultaneously, the big banks of Berlin received from various French financial institutions letters, couched in almost identical terms and referring unmistakably to the Paris negotiations, announcing a curtailment of the credits which had been put at Germany's disposal. This was followed by such a heavy withdrawal of foreign exchange that on May 7, 1929, the coverage in gold and exchange had, at 41%, almost reached the legal minimum, and the Reichsbank, seeing that the increase in the discount rate had been ineffective, had to resort to a restriction of credit." [2]

2 Schacht, *The End of Reparations, op. cit.*, p. 89.

Dr. Schacht, in the above statement and in the temper of the whole book, is unnecessarily vituperative, partly because he was personally disgruntled at the lack of support given to him by his own government during the Paris conference, partly because of the attacks in the German and foreign press on the policy of the Reichsbank for which he was personally responsible, and partly because the book was written as a means of self-justification after his resignation from the presidency of the Reichsbank in March 1930. Nevertheless, there is enough truth and accuracy in his frank accusation to give one pause. No doubt, maturing foreign obligations in Germany caused the first withdrawals of foreign exchange. These withdrawals were not covered, as they had been in the past, by fresh credits from abroad because of the greater attraction of the American short-term money market. No doubt, the prolonged negotiations at Paris, with recurring crises which made it seem doubtful from day to day that the Powers could reach a working agreement, weakened confidence of investors in German stability and caused cumulative withdrawals of short-term funds. However, the withdrawals during the first week of May 1929 seem actually to have had their origin in the Paris market, a fact that was unfortunate (if not actually vicious) for the hope of renewed international harmony. It seems naïve to suppose that these withdrawals could not have been prevented by the French government which was even then acting as host to the Young Commission, a commission made up of outstanding financial and political representatives of Germany's creditors. Dr. Schacht was voicing the opinion of a large number of the German people when he placed the blame for the 1929 run on the German currency on the "French politicians and bankers." He was wholly correct in his conclusion, if, perhaps, not completely just in placing the whole blame on French political tactics, when he says, "This French attack, during the Paris Conference of Experts, upon the German currency was the seed of that ever-growing lack of confidence which today hangs heavy over the entire economic world." [3] The Paris conference was the beginning of the collapse of world confidence which, in Germany, worked quickly toward cumulative disaster.

From May 1929 to the final run upon the banking system in the summer of 1931, one sees in Germany a curious interplay of political and economic factors, so that it becomes impossible to separate the two forces in order to determine a cause and effect relationship. Particularly is this true in any analysis of Reichsbank policy, for Reichsbank policy itself became entangled in the internal political dissension. The president of the Reichsbank, Dr. Schacht, headed the German delegation at the Young Conference in Paris. He was also the governmental representative to the succeeding Hague Conference in August 1929, and a member of the organizing board of the Bank for International Settlements. Although he refused to represent the German government at the second Hague Conference called in December 1929, he was present at the Hague and became more and more irritated at what he called the " insane " policy of the German delegates who, in " wanton " disregard of the economic factors involved, placed all of their emphasis on political concessions. This dissension culminated in the resignation of Dr. Schacht as president of the Reichsbank in March 1930—a position which he had held continuously since 1923—and in the taking over of the presidency by Dr. Hans Luther.

Signs of a political rift within Germany appeared during the Young Conference. The difficulty was rooted in the uncertain state of public finances, which made the German government willing to sacrifice a long-run gain for immediate benefit, and in the pressure brought to bear upon the German delegates to give first consideration at all times to the securing of national independence from all foreign interference. As was pointed out in the last chapter, the Reichsbank's point of view had crystallized during the previous five years into a

3 Schacht, *The End of Reparations*, *op. cit.*, p. 91.

deep-rooted belief that reduced taxes and reduced public spending were essential to sound economic development, and that foreign borrowing should be discouraged at all times. This attitude was unpopular in Germany, particularly with the big bankers and industrialists who reaped immediate benefit from large foreign deposits. The Reichsbank expressed a certain sympathy with the government for its desire to regain national sovereignty and it, itself, would be benefitted by the withdrawal of the foreign members on its general council but, while important, these considerations were for the Reichsbank secondary to the broader economic need of decreased reparations and increased outlets for German exports. Entangled with these clear-cut conflicts, however, was the political interplay of party against party. The Social Democratic Party was falling more and more into disrepute and a growing nationalistic and communistic opposition was making itself heard. Political capital was to be made out of the tangled issues at stake. The president of the Reichsbank (Dr. Schacht) gradually became the voice of the nationalistic opposition.

As early as 1927, the Agent General for Reparations had called attention to the necessity for tax reduction within Germany and for balanced budgets on the basis of radically reduced expenditures. Time and again, the government had promised to reorganize its finances, but very little was done. During the year 1928 tax receipts fell off, and by May 1929 the national government found itself unable to meet current expenses. The credit restriction policy inaugurated by the Reichsbank on May 7, 1929 tightened the money market and increased the costs of borrowing. There were at this time violent attacks in the German press upon the restriction policy of the Reichsbank which even went so far as to attack the purity of the Reichsbank's motives. The opposition papers leaped to the defense.[4] The government covered its immediate needs by a loan of 120

4 See below pp. 361-365 for a discussion and evaluation of the 1929 credit restriction policy.

million reichsmarks from a consortium of Berlin bankers secured by a pledge of the anticipated proceeds of a proposed internal loan of 500 million reichsmarks to be floated in June. The results of this loan were disappointing, to say the least. The loan failed miserably. The net proceeds were scarcely sufficient to cover the previous bank loan. Again, the government found itself unable to meet its current needs. The Reichsbank—the usual support of the government—refused to grant credit to the government until definite steps were taken to reorganize the budget. The large Berlin banks, following the lead of the Reichsbank, were not willing to grant loans and the domestic money market was incapable of absorbing a large bond issue. In this emergency, the government decided to resort to foreign borrowing and requested the Reichsbank to act as its fiscal agent in the negotiations. The Reichsbank refused on the grounds that foreign borrowing for current expenses was a dangerous hand-to-mouth policy which it would not encourage. The loan of $50,000,000 at 8½% was floated, however, through Dillon Reed and Company, in the New York market and backed by a consortium of Berlin banks. From this time on the Reichsbank and the government were in a conflict which became more open and bitter as the international negotiations proceeded.[5]

The Young Plan was agreed upon by the Committee of Experts on June 7, 1929. Agreement was hailed with a sigh of relief by the entire world, but there was no rejoicing as there had been when the Dawes Plan was accepted. The Young Plan was simply considered the best compromise that could be achieved under the circumstances. And the circumstances were bad indeed. In Germany, the debate over acceptance was extremely bitter. Although there was little doubt of its final approval, because it relieved Germany from foreign interference cordially hated by all political parties, hope of relief from

5 See, in this connection, Schacht, *The End of Reparations, op. cit.*, pp. 91-92.

reparations pressure was finally destroyed. As inner political developments subsequently showed, the Young Plan actually strengthened the hands of the two radical parties opposed to the Social Democratic government, the Communists and the National Socialists.

It is not necessary to go into the provisions of the Young Plan in detail. Briefly, it centered about the agreement to return to Germany complete financial control of her own affairs and, in order to facilitate transfer and to protect the German currency, an international bank was to be established by the central banks of all countries that wanted to participate. The function of the Bank for International Settlements was to place transfer upon a sound financial basis and to remove it from the danger of political entanglements. "The proposed plan continues and completes the work begun by the Dawes Plan, which the position alike of Germany and of other countries made it impossible to do more than indicate in outline in 1924. By the final reduction and fixation of the German debt, by the establishment of a progressive scale of annuities, and by the facilities which the new Bank offers for lessening disturbance in the payment of the annuities, it sets the seal of the inclusion of the German debt in the list of international settlements. If it involves appreciable reduction of payments to the creditor countries on what might have been anticipated under the continued operation of the Dawes Plan, it at the same time eliminates the uncertainties which were inherent in that Plan, and were equally inimical to the interest of the Debtor and to the Creditors, by substituting a definite settlement under which the Debtor knows the exact extent of his obligations." [6] The annuities were to run for fifty-nine years averaging for each of the first thirty-seven years, 1,988 million reichsmarks. In the following twenty-two years, the annual average was about 1,600 million reichsmarks; 660 million reichsmarks was to be an unconditional and non-postponable demand, secured by pro-

6 *Report of the Committee of Experts,* official text, pp. 47-48.

ceeds from the German railroads; the remainder was to be supplied from the budget of the Reich out of special taxes listed in the Plan. For the first ten years of the operation of the Plan, deliveries in kind were permitted to make up a portion of the payments, such deliveries to decrease from 750 million reichsmarks in the first year to 300 million in the tenth. Careful provision was made for postponement of payments for two years through notification by the German government to the Bank for International Settlements. Upon such notification, the Bank for International Settlements was to appoint an investigating committee to inquire into the situation and to advise the creditor governments of the true conditions.

Today, of course, the whole Young Plan seems utter nonsense. Then, it probably seemed feasible. The basis of the annuity schedule in the Young Plan was the happy belief that the world would become increasingly prosperous through time. Unfortunately, the year 1929 was the beginning of the world depression, which each year pressed more severely upon all nations—particularly upon Germany, with the reparations burden becoming heavier as the world price level declined.

The basic problems inherent in the structure of the post-war German economy became acute in the face of the world business depression and were further intensified by the precarious condition of the public finances and the temperamental flow of foreign funds as international confidence zig-zagged downward. The lack of balance in the capital market made it impossible to float bond issues sucessfully unless interest rates were between seven and nine percent, and after September 1930 the market failed completely to absorb new issues. Increasing business failures discouraged the purchase of new stock shares, and once more German business was forced to finance itself through short-term loans in the money market. Throughout 1929, the money market failed to show any elasticity; rates were high because of the increased demand and the failure of foreign funds to return to Germany. In 1930, the situation in the money market was eased. Funds began to accumulate in the banks as the depression went on and the collapse of the New York stock market released foreign funds that were again attracted by the higher German rates. World money rates declined sharply throughout 1930 and the German rates followed this downward trend, although always lagging behind the world level.

The Reichsbank rediscount rate, which was decreased from 7½% to 7% in November 1929, was lowered progressively until, by June 30, 1930, it stood at 4%. Aside from cheapening the cost of credit as far as possible, the Reichsbank took no steps to check the depression. The aggressiveness that it had shown in previous years was lost because of the conflict between the government and the Bank. Dr. Schacht has complained that, from the time of the Young Conference until his resignation in March 1930, the Reich deliberately failed to keep the Reichsbank in touch with important government affairs. Nevertheless, the imperative need of the government for credit gave the Reichsbank a strong bargaining position. In December 1929, the Finance Minister requested a loan of 350 million reichsmarks to cover the year-end deficit. This the Reichsbank refused to grant, unless the Reichstag would pass a law providing for repayment during the next budget year in equal monthly installments—funds for repayment to be secured through increased taxes or decreased expenditures. Such a law was passed by the Reichstag, but the controversy led to the resignation of the Mueller cabinet in March 1930.[7] The new cabinet took a more determined position in regard to the reduction of public expenditures and there was some indication of improvement during 1930.

The motives of the Reichsbank in this action were probably a mixture of political antipathy toward the existing government, which had been accumulating for months, and the economic desire to check the undoubtedly dangerous position of the government finances. The results were also complicated by po-

7 Schacht, *The End of Reparations, op. cit.*, pp. 154-156.

litical and economic reactions. The enforced restriction in expenditure gained foreign confidence and make it possible for the Reichsbank to negotiate successfully for the government the discount of the match monopoly loan of the Swedish Match Trust in the American market, March 25, 1930.[8] It also, temporarily, led to an inflow of foreign funds. On the other hand, the strength of the Social Democratic Party rested largely upon its liberal program of public spending. The government was already in disrepute with a growing number of individuals because of its temporizing policy with foreign governments. Dislike of the Young Plan and of the Hague agreement of January 1930, which permitted foreign governments to use military pressure to force German payment of reparations, intensified the nationalistic sentiment. The cumulative disasters of the depression—reduced standards of living and increasing unemployment—led to social unrest which was strengthened by the inability of the government to increase its relief expenditures. The September 1930 elections were a clear indication of the shift of public opinion in Germany. The National Socialist Party polled a total of 6,380,000 votes and gained 110 seats in the Reichstag. The Communist Party also made substantial gains. The strength of the Social Democratic Party was consequently so undermined that it could govern only with the support of opposition parties. The coalition government with Dr. Bruening at the head was largely an alliance between the Social Democratic Party and his Catholic Center Party.

The reaction to the September elections was an immediate withdrawal of large amounts of foreign short-term funds on deposit in Germany and the flight of domestic capital. From the middle of September to the middle of October, the Reichsbank lost one billion reichsmarks of gold and foreign exchange. This attack on the banking system was a blow to Germany's credit from which she never wholly recovered. Quotations of

8 $50,000,000 backed by Kreuger and Toll debentures and floated in America by a consortium of American bankers headed by Lee Higginson and Company.

German long-term loans began to drop in foreign markets more rapidly than the general decline in security prices. Foreign funds did not return to the country in any appreciable amounts, and by the early part of 1931 there was a slow but constant loss of short-term funds on deposit.

The Reichsbank felt the tension in the world money markets and in the German money market. There was a constant demand for foreign exchange and an increased turnover in its own deposits. Savings bank deposits and commercial bank deposits, which had been decreasing steadily since 1930, developed a more rapid downward tendency. It was evident that the whole national and international credit structure was becoming panicky. The two danger signs of the 1929 run and the 1930 run on the German banking system seem to have been interpreted correctly by France. She began, in 1929, a consistent repatriation of her foreign balances which directly influenced the London, New York and Swiss money markets and indirectly increased the feeling of unrest in all centers. The proposed German-Austrian Tariff Union had strained political feeling to the utmost, when into this surcharged atmosphere in May 1931 fell the announcement of the collapse of the Austrian *Kreditanstalt*—one of the strongest supports of central European credit life.

THE 1931 CRISIS [9]

This "crack" which appeared in the over-extended international financial structure broadened until it pulled down the entire "patched façade of international finance." The collapse of the confidence upon which the world's credit had rested, precariously, since the World War brought even England to an abandonment of the gold standard in September 1931, but before that date it had completely paralyzed the credit mechanism of Germany and had destroyed, finally, the last vestige of hope in an economy based upon internationalism.

9 All figures quoted in this section have been taken from *Vierteljahrshefte zur Konjuntur Forschung.*

The failure of the Austrian *Kreditanstalt* was the signal for withdrawals of foreign balances from all central European countries. The movement began slowly at first and then gathered speed, as event followed event with bewildering rapidity. The intermixture of political, economic, and financial distrust of the German nation centered the attack on that country. By the end of the first week in June, the Reichsbank had lost 200 million reichsmarks of gold and foreign exchange. The flight of domestic capital began after the first week in June in response to political fears engendered by the emergency decrees of the Bruening government announced on June 6, 1931.[10] In the following week—June 7 to 15—the Reichsbank lost 610 million reichsmarks in gold and foreign exchange which decreased these holdings to 1,766 million reichsmarks. On June 13, the Reichsbank raised its discount rate by 2%—from 5% to 7%. This unprecedented step only served to heighten foreign and domestic fears. On June 15, the Reichsbank for a third time inaugurated a policy of credit restriction although, at first, the limitations were comparatively mild. On June 16, however, political tension in Germany reached a dangerous point and precipitated new and more rapid withdrawals of gold and foreign exchange. The opposition of the National Socialists and of the Communists to the emergency decrees of the Bruening government led to a demand for a special session of the Reichstag and of the Budget Committee. Dr. Bruening opposed these demands and announced that he would resign if the Reichstag or the Budget Committee were summoned at this time. The Bruening cabinet won in this contest and for two days the tempo of withdrawals slowed down. Then, on June 18, came the announcement of the collapse of the Nordewolle concern of Bremen—one of the largest textile industries in Germany and one known to be supported by some

10 These decrees announced reduced payment of all social insurance benefits—old age, unemployment, sickness, etc. Luxury taxes were substantially increased as were also consumption taxes on bread, beer, and the like. *Reichsgesetzblatt*, 1931.

of the largest banks. In one day, June 18, the Reichsbank lost 150 million reichsmarks of gold and foreign exchange. The following day, signs of panic were felt in the Berlin stock exchange that developed into a complete rout in the next two days. The gold and foreign exchange position of the Reichsbank reached the legal coverage of 40% and drastic credit restriction was applied. The use of a private discount rate in the money market was suspended and the Reichsbank began to concentrate as far as possible all foreign exchange transactions in its own hands. On Saturday, June 21, the Hoover moratorium was announced, which brought an immediate sense of relief to the entire world. The Reichsbank had up to this time weathered the storm by prompt payment of gold and foreign exchange and by the protection of the currency through its refusal to increase its note circulation. Nevertheless, the gold and foreign exchange position of the Reichsbank had reached the danger point of 1,504 million reichsmarks on June 23—a decrease of 1,072 million reichsmarks in four weeks. The gold coverage for the notes in circulation (4,105 million reichsmarks) went below the legal minimum — to 36.6%. Its bill position had increased in the same period from 1,816 million reichsmarks to 2,350 million, but the application of credit restriction limited the Bank's ability to continue the financing of further withdrawals through increased bill credits. On the strength of the Hoover moratorium, the Reichsbank was granted, on June 25, a loan of $100,000,000 from the Bank for International Settlements, the Bank of England, the Bank of France, and the Federal Reserve Bank of New York.

The Hoover suggestion was that all reparations and war debt payments be suspended for one year. In so far as the existence of war debts and reparations were at the root of the crisis, the possibility of renewed confidence through this gesture was enormous. France, however, received the suggestion with coldness—even hostility—which destroyed the psychological effect that might otherwise have been obtained. Although the signing of the moratorium agreement on June 6 meant a real relief to Germany, it failed to stop the immediate crisis. Foreign withdrawals continued. The gold and foreign exchange position of the Reichsbank had been strengthened by the foreign central bank loan, but by the end of June its holdings were down to 1,721 million reichsmarks. By the end of the first week in July, the gold coverage was again under 40%.

In the meantime, repercussions began to be felt in Germany and the crisis — so far purely international — began to show itself in withdrawals of domestic savings. There was a noticeable tendency toward the purchase of real value commodities—always a panic sign on the part of the inflation-wise German public. The stringency in the money market because of the Reichsbank's credit restriction policy was relieved somewhat by the offer of a 500 million reichsmark support credit by German industrialists to the Gold Discount Bank. Dr. Luther, with this credit as backing, flew to London on July 7 in the hope of getting further international support for the Reichsbank. He was unsuccessful in London, Paris and Basle and returned to Berlin to face the domestic run on the banking system. In the week of July 7-13, the Reichsbank lost 202 million reichsmarks gold and foreign exchange, and domestic bank deposits decreased by over 500 million reichsmarks. On July 12, the rumors of the impending collapse of the *Darmstädter und Nationalbank*—one of the largest and most influential banks in Germany—were verified by the government's announcement that all deposits of the bank would be guaranteed by the Reich. The announcement failed to check the panic. The *Darmstädter* bank failed on July 13; the same day the stock exchange was closed. On July 14 and 15, all German banks were closed with the exception of the Reichsbank, the Gold Discount Bank, and the private note banks. On July 15, the Gold Discount Bank placed at the disposal of the Reichsbank a $50,000,000 foreign credit which it held in New York.

The banks were reopened for limited business on July 16, but no payments could be made and no clearings were to be handled except through the Reichsbank, the Gold Discount Bank and the private note banks. The government announced that it would guarantee all domestic bank deposits, ordered all holders of foreign exchange of 20,000 reichsmarks and more to declare their holdings at the Reichsbank and to be ready to sell all additional foreign exchange on demand at a fixed rate. It reduced the statutory reserve ratio of the Reichsbank from 40% to 30% and issued emergency decrees restraining the flight of capital. The Reichsbank increased its discount rate to 10% and its lombard rate to 15% and, although still maintaining a policy of credit restriction, restriction was eased somewhat in favor of control through discount rate. By July 20, the banks were able to make limited payments to German customers, the internal fears subsided to some extent and the government and the Reichsbank began to devise measures to cope with the many problems of relief and reorganization.

In the meantime, a Seven-Power Conference was called to meet in London on July 20 to consider the immediate steps for relief of the German situation.[11] This committee recommended on July 23: (1) that the central bank credit of $100,000,000 granted to the Reichsbank through the Bank for International Settlements be continued temporarily, (2) that all short-term credit withdrawals should cease until the situation could be more thoroughly investigated, and (3) that the Bank for International Settlements should appoint an investigating committee to "inquire into the immediate further credit needs of Germany and to study the possibilities of converting a portion of short-term credits into long-term credits." The first Basle committee began its work almost immediately and made its report on August 18. Since the figures gathered by this committee are the first authoritative ones on the

11 The nations represented were: Germany, France, Great Britain, United States, Italy, Belgium and Japan.

international credit position of Germany, it seems worth while to summarize their findings briefly.[12]

During the seven years 1924 to 1930 inclusive, Germany's foreign indebtedness grew faster than her foreign assets by 18.2 billion reichsmarks. With this, plus the three billion reichsmarks that she received from services to foreigners she was enabled to:

a) pay interest on her commercial debt amounting during the seven years to	RM 2.5 bil.
b) add to her holdings of gold and foreign exchange	RM 2.5 bil.
c) pay reparations	RM 10.3 bil.
d) pay for a surplus of imports over exports (including deliveries in kind)	RM 6.3 bil.
	RM 21.2 bil.

Her capital position at the end of 1930 in regard to foreign indebtedness was:[13]

Total foreign investments in Germany		RM 25.5 bil.
Total German investments abroad		RM 9.7 bil.
Net debt to foreigners		RM 15.8 bil.
of which short-term debts	RM 10.3 bil.	
long-term debts	RM 5.5 bil.	
		RM 15.8 bil.

The short-term debts consisted of 47% in foreign trade acceptance liabilities, 40% in deposits payable in foreign currencies, and the remainder in reichsmark balances of foreign creditors. The short-term credits were used by the banks as working capital and "therefore could not be readily with-

12 Report of the committee (known as the Wiggin Committee) appointed on the recommendation of the London Conference, 1931, official English text.

13 The estimate of the first Basle committee (the Wiggin report) was changed later by the second Basle committee, see below, p. 230. The figure here of net debt to foreigners of 15.8 billion reichsmarks allows for pre-war foreign investments still held by German citizens abroad. It differs, therefore, from the 18.2 billion reichsmarks which represent only the 1924-1930 position.

drawn without grave danger to the financial structure." The following table shows the results of the 1931 withdrawals on the short-term debt of Germany (excluding the central bank loans obtained by the Reichsbank during the summer crisis which amounted to about 630 million reichsmarks).

TABLE XXXI. SHORT-TERM DEBT OF GERMANY [a]

December 31, 1930 and July 31, 1931

	December 31, 1930	July 31, 1931
	In billions of Rm.	
Public authorities	1.1	0.8
Banks		
a) current accounts and acceptance liabilities	7.0	5.1
b) other liabilities	0.2	
Other short-term liabilities	2.0	1.5
Total	10.3	7.4

[a] Estimate of the first Basle committee. Later changed by the second Basle committee. See below, p. 230.

In addition to the withdrawal of 2.9 billion reichsmarks of short-term credits in the seven months of 1931, there was an additional outflow of capital funds of about 3.5 billion reichsmarks representing, to some extent, the flight of domestic capital during the crisis and the sale by foreigners of long-term investments in Germany. This total outflow of 6.4 billion reichsmarks was met by the gold and foreign exchange assets of the Reichsbank to the amount of two billion reichsmarks, by the foreign assets of the banks to about one billion reichsmarks, and the remainder from the sale of German assets abroad.

In conclusion, the committee stated: "We arrive, therefore, at the definite conclusion that it is necessary in the general interest as well as in that of Germany:

1) that the existing volume of Germany's foreign credits should be maintained, and
2) that part at all events of the capital which has been withdrawn should be replaced from foreign sources.[14]

The committee, however, frowned upon further short-term credits and in regard to the second conclusion above, realized that a long-term credit in the face of the world's situation was unlikely. The recognition of the political difficulty is contained in the final paragraph, "We therefore conclude by urging most earnestly upon all Governments concerned that they lose no time in taking the necessary measures for bringing about such conditions as will allow financial operations to bring to Germany — and thereby to the world — sorely needed assistance."[15] As is well known, the first recommendation of the committee was carried out by the first standstill agreement signed August 19, to run for a period of six months from September 1, 1931. The second recommendation proved impossible of execution, for the political movements in Germany intensified the distrust of foreign nations and Germany was left to work out her own salvation without further foreign assistance.

Although the first standstill agreement performed a real service in preventing a renewed run upon the German banking system, it did not mean that Germany was relieved from the necessity of finding foreign exchange to meet large foreign payments. The agreement covered only certain types of private short-term loans. It excluded all service charges on long-term loans, loans granted to finance growing crops or goods-in-process, call money loans, short-term money advanced against securities (largely report money), money advanced against mortgages and collateral, forward exchange contracts (which were paid as they fell due), overdue contracts (which were to be settled at once), and all claims arising from breach of

14 Wiggin Committee, official text.

15 *Ibid.*

contract. It excluded, furthermore, all short-term borrowings of the public authorities, and all commitments of the *J. F. Schröeder Bank* of Bremen and the *Bank für Auswärtigen Handel.* Reichsmark balances held by foreigners in German banks (13% of the short-term debt) were to be paid in foreign exchange — 25% on the day the agreement was signed, and 15% of the original balance monthly until the entire amount was liquidated; the Reichsbank was to hold itself responsible for these payments that could not be delayed without the special consent of the Bank for International Settlements. Monthly interest payments in foreign exchange were also to be paid on the balances covered by the standstill agreement. The agreement covered about five billion reichsmarks of short-term credits in currencies other than reichsmarks, made up of acceptances, time deposits, cash advances, and other forms of special credit agreements. These were to be maintained at their existing level (subject to the agreement of debtors and creditors) and all unused credit lines to German accounts in foreign countries were to be used to the full. Payments for maturing acceptances were to be made by the debtor to the Gold Discount Bank to the account of the creditor. The Gold Discount Bank was to rediscount bills drawn upon these deposits up to 10% of the total. The Reichsbank was required to release foreign exchange for the payment of the creditor's balances "as and when possible." [16]

The total foreign indebtedness of Germany, on February 29, 1932 — six months after the first standstill agreement was signed—long and short-term, is shown in Table XXXII, together with the distribution of the debt to different creditor countries.

The terms of the first standstill agreement were, therefore, not particularly favorable to Germany if one considers her total indebtedness as well as her internal credit position. Financial panic, superimposed upon a severe and long-drawn-out

16 First Standstill Agreement, official English text.

TABLE XXXII. GERMAN FOREIGN INDEBTEDNESS DISTRIBUTED ACCORDING TO CREDITOR COUNTRIES, FEBRUARY 29, 1932 [a]

Country	Short-term	Long-term	Total
	In millions of reichsmarks		
United States	3,227	5,165	8,392
Netherlands	1,661	1,914	3,575
Switzerland	1,615	1,146	2,761
Great Britain	1,286	1,129	2,415
France	474	482	956
Sweden	136	167	303
Belgium	119	80	199
Czechoslovakia	157	18	175
Italy	73	74	147
Denmark	51	9	60
Norway	14	5	19
Other countries [b]	1,340	281	1,621
Total	10,153 [c]	10,470	20,623 [d]

[a] *Wirtschaft und Statistik,* Volume XII, 1932, p. 492.

[b] Includes investments by the Bank for International Settlements in Germany, as well as Central Bank loans made under the direction of the Bank for International Settlements.

[c] Compare this figure with the estimate of the Wiggin Committee of 7.4 billion reichsmarks at the end of July 1931. The second Basle committee raised the July figure to 12 billion reichsmarks. This total for February is based on the revised July estimates. See also the League of Nations estimates made in 1932-33, below Table XXXIII, p. 233.

[d] The total foreign indebtedness of Germany was said to be 10 billion reichsmarks at the end of February 1938. *New York Times,* March 8, 1938.

business depression, had necessitated once more the patient rebuilding of the entire economic structure—this time without any hope of foreign assistance, and on the whole, with a cordial dislike and distrust of foreign help. And yet, Germany's entire economic system was peculiarly intertwined with that of the rest of the world.

THE DOMESTIC STRUGGLE AGAINST THE CRISIS

The most immediate problems facing Germany were those resulting from the loss of domestic confidence in the stability of the reichsmark and in the banking system. More fundamental was the need to readjust the entire economy to the altered credit position, and to devise ways and means of reducing imports and of increasing exports. In no other way could Germany hope to acquire enough foreign exchange to meet her existing debts and to pay for her essential imports. Other problems equally pressing were connected with the depression, such as decreasing employment, increasing demands for public relief in the face of dwindling resources, and decreasing standards of living; and above and through all problems rumbled the increasing threat of political chaos.

The two irreconcilable tasks facing the Reichsbank after the bank holiday were (1) to guarantee the stability of the reichsmark in order to restore confidence, and (2) to make credit as easy and as cheap as possible in order to support the banking system and to prop up industries badly in need of credit. At the end of July 1931, the Reichsbank had only 1,609.6 million reichsmarks of gold and foreign exchange, of which 630 million were loaned to it by foreign central banks and the Bank for International Settlements.[17] It had notes in circulation to the amount of 4,453.7 million reichsmarks which gave it a legal coverage of 36.1%, if it counted its central bank credit as a part of the legal coverage, but only 21.9% if this was omitted.[18] At the same time, domestic bill credits and credits to the Reich amounted to 3,521.6 million reichsmarks.[19] The Reichsbank, therefore, was not in a position to finance the support and reorganization of the banking system without endangering the confidence of the German people in currency stability, nor could it (legally) enlarge its bill portfolio to the

17 *Untersuchung des Bankwesens, op. cit.*, Part II, p. 454.

18 *Ibid.*

19 *Ibid.*

extent that banking and industry required. The Reichsbank law set limits to the ability to give quick relief. The financing of the support credits from the Reich required discount facilities far above the 400 million reichsmarks permitted by law. Lombard loans of the Reichsbank had been already stretched to the utmost. In this emergency, the Gold Discount Bank, the daughter institution of the Reichsbank, became the key institution in the reorganization plans; new banks were founded to supply essential credit facilities; and the Reichsbank overstepped its legal limitations.

The first essential — as in all crises of confidence — was to devise means of converting deposits into cash. The two-day bank holiday was really called to gain time to perfect these plans. All banks were in need of immediate cash which, in the last analysis, could be supplied only by the Reichsbank. The banks had suffered severely during the previous six weeks and all of their liquid assets were used up. The *Darmstädter und Nationalbank* had failed and the other Berlin banks were in difficulties; the savings banks, particularly, needed support. Funds for bank support were supplied by the Reich through treasury bills discounted at the Gold Discount Bank. These bills were lombardable with the Reichsbank up to 75% of their face value (1930 change in Reichsbank law). A new banking institution, the Akzept bank *A. G.,* was founded on July 21 with a 200 million reichsmark share capital (25% paid in) supplied by the Reich (eighty million reichsmarks), the Gold Discount Bank (twenty million), the *Deutschenkasse, Bank für Industrie, Deutsche Rentenbankkreditanstalt,* Seehandlung and *Dresdner Bank* (each twelve million reichsmarks), and the remainder from the Berlin Great Banks. The special task of the Akzept bank was to guarantee all credits of the banks—particularly acceptances and bills. The Reichsbank and the Akzept bank worked closely together; in fact, except in Berlin, the Reichsbank branches were used as headquarters for the Akzept bank. The Reichsbank stood ready to take over bills guaranteed by the Akzept bank in any amounts that would become necessary and to issue notes with these bills as security.

On August 1, 1931, the Reichsbank abandoned its credit restriction policy in favor of control through discount rate. The bank rate was increased to 15% and the lombard rate to 20% but, within these high limits, the Reichsbank agreed to rediscount all bills presented to it. At the same time, more rigid limits on foreign exchange transactions were put into force—all holders of foreign exchange in an amount of 3,000 reichsmarks and over were to declare their holdings at the Reichsbank and to be ready to sell on demand. By October 1, the free holding of foreign exchange was decreased to 200 reichsmarks and all new foreign exchange had to be delivered to the Reichsbank within three days. The credit banks were permitted to carry on a free business by the 5th of August, and on the 8th, the savings banks were freed from all limitations. By the 12th of August, the Reichsbank was able to lower its discount rate to 10% and its lombard rate to 12%; by September 2, in the interests of cheaper credit, a further decrease to 8% and 10% was made. On December 10, these rates were lowered to 7% and 8% respectively.

The demands made upon these credit institutions up to the end of 1931 were enormous. The Danat Bank (*Darmstädter und National*) which was reopened under government control in September, required more than 100 million reichsmarks, the *Dresdner Bank* an even larger amount. The large land banks of Rheinprovinz—Düsseldorf—and the North German Bank of Bremen required not only rediscount credit from the Akzept bank and the Reichsbank, but also direct support from the Reich and from the States. Smaller banks also made very heavy demands. The savings banks, however, were faced with even greater difficulties, for withdrawals continued until the end of the year. The *Deutsche Girozentrale* was able to meet the withdrawals through August aided by the liberal lombard policy of the Reichsbank, but by September 1 it had to have special credits from the Reichsbank, through the Akzept bank, of 500 million reichsmarks. The Reich required the States to help the savings banks, but it, itself, gave in direct relief 150 million reichsmarks to the smaller Giro banks. However, before the end of the year the *Deutsche Girozentrale* required a further support of 500 million reichsmarks. By the beginning of 1932, the panic withdrawals of savings stopped and during 1932 there was even a slight gain in deposits. The Reich had granted total support credits of over one billion reichsmarks. In order to relieve the Reichsbank of a portion of the rediscount business and to create a discount bank to stand between the Reichsbank and the money market, the *Diskont-Kompagnie A.G.* was organized on December 5, 1931. Fifty percent of the shares of this bank are owned by the Gold Discount Bank which makes the Diskontbank a second institution directly controlled by the Reichsbank. The difficulties of the banks in withstanding the crisis led to plans for complete reorganization of the banking system which were put into effect in 1932.

As was pointed out in Chapter III, the German banks carry on a type of credit banking which involves them heavily in the success or failure of particular industrial concerns. It was, to some extent, the loss falling upon the Danat Bank, because of the failure of the Nordwolle textile concern at Bremen, that forced it to close its doors on July 13, 1931. This bank had a capitalization of only thirty million reichsmarks, while its commitments to the Nordwolle firm alone were about fifty million reichsmarks. The Danat Bank also had engaged in considerable "light-hearted" credit expansion on the basis of large foreign deposits, which placed it in a bad position during the foreign run upon the German banks;[20] it is estimated that it lost 650 million reichsmarks of foreign deposits in the six weeks prior to its collapse. What was true of the Danat Bank, was true of all German banks in a greater or lesser degree. Small capitalization and small reserves, an over-extended credit position of two and one-half to three and one-half times the

20 *London Economist,* July 18, 1931. The Danat Bank had over one billion reichsmarks foreign deposits on June 1, 1931.

pre-war volume, supported by large foreign short-term deposits, the ill-considered but often unavoidable policy of borrowing short-term and lending long-term, and portfolios heavily tied up in the stocks of industrial concerns all worked together to freeze bank assets and to make credit banks vulnerable to attack. The money market practice of interbank buying of acceptances meant, moreover, that all banks were affected seriously by the distress or failure of a few.

The bank reorganization was carried out by the Reich and the Reichsbank in February 1932. Special balance sheets demanded by the Reichsbank prior to reorganization revealed the full extent of the capital losses. Not only were the banks heavily in debt to the Reich and to the Reichsbank, but all reserves, hidden and open, had been completely wiped out. The basis of the reorganization plan involved the writing down of frozen assets as a capital loss and the broadening of bank capitalization through the sale of new shares to the Reich, the Reichsbank, the Gold Discount Bank and, to a small extent, the public. The Reichsbank purchased shares out of its profits for 1931. It increased the capitalization of the Gold Discount Bank by 200 million reichsmarks to enable the Gold Discount Bank to purchase bank shares. The Reich purchased shares, loaned money to the banks and donated funds outright. Furthermore, new reserves were to be built up through direct contributions to the banks from the Reich, these loans to be repaid out of future bank profits. Capital and reserve were to bear some proportion to the total amount of business carried on by the banks.[21] As a result of the "purification" of the banking system, the Danat Bank was merged with the *Dresdner Bank*, making this latter the largest banking institution in Germany, and owned 90% by the government. The total cost to the Reich of the bank reorganization was given by Finance Minister Dietrich to the budget committee on May 2, 1932 as follows:

21 *Annual Report of the Reichsbank*, 1931.

Cost of purchasing shares	RM 338,500,000
Loans to banks (to be repaid)	RM 307,200,000
Advances regarded as lost	RM 185,000,000
Guarantees	RM 285,000,000
Foreign credit advanced to Danat Bank and guaranteed by the Reich when that bank was merged with the *Dresdner Bank*	RM 400,000,000
Total	RM 1,515,700,000

The effect of the 1932 bank reorganization on the German banking system has been referred to in Chapter III. The control position of the Reichsbank was so strengthened that from this time on it progressed by logical stages to that dominance over the economic life of the nation that it holds today under the National Socialist regime. The whole credit mechanism of the country was geared to the Reichsbank. It became—as it had been in the brief period in 1924 before foreign funds began to hamper its activities—the sole credit source of the nation. The normal credit paper of a prosperous economy—the trade bill and the bank acceptance—decreased in importance as depression continued and government treasury bills began to take their place. New credit institutions to handle government finance were organized in 1932 and 1933 to make liquid and legally rediscountable types of credit paper that originated from programs of government spending.[22] The Reichsbank participated directly or indirectly in the organization and control of these new institutions.

One sees in the latter part of 1931 and in the early months of 1932 the laying of the first steps toward a controlled economy in Germany. In fact, in June 1931 the Bruening government began to issue " emergency " decrees and, during

22 Since 1933 the activities of the National Socialist government have been financed largely through these same institutions. The annual excess of expenditure over receipts is acquired through the issuing of three-month bills which are widely held throughout the banking system, are discountable at these support institutions and rediscountable at the Reichsbank. No accurate figure is available as to the amount of these bills now in existence. A rough estimate is probably fifty to sixty billion reichsmarks as of December 31, 1937.

the trying days of the crisis, governmental orders of a radical nature were issued by President von Hindenburg and the cabinet. Control of a crisis that never stopped was the reason for progressive centralization of authority. Control, once begun under threat of financial and economic chaos, leads inevitably to more control in modern integrated credit societies. That the German nation was threatened with complete collapse after the summer crisis there can be no doubt. Its recovery after the inflation period was based upon foreign funds; its banking system, money market, industrial life and standard of living depended upon the continued flow of those funds and the progressive development of foreign markets. Suddenly, the nation was faced with the necessity of reorganizing its economic life upon a self-contained basis if it was to exist at all.

Nationalism was thrust upon Germany in the economic sphere before it was ardently embraced as a political doctrine. The transformation of the German nation from one dependent upon foreign political and economic developments to one emotionally integrated, economically controlled and loudly self-assertive was complete one year and eight months after the crisis of July 1931. The transformation centered about the determined non-compromising attitude of the German government toward foreign political and economic demands, which became apparent for the first time in November 1931, about the aggressive attack upon the economic problems of depression as a national problem capable of solution, and about the radical shift in government from the Social Democratic Party to the decisive National Socialists under the emotional leadership of Herr Hitler.

Germany's Withdrawal from Foreign Contacts

On November 19, 1931, the German government notified the Bank for International Settlements that under Article 119 of the Young Plan she would be unable to make any further transfers on reparations account. This action had been predicted as early as October 1930, after the loss of gold and foreign exchange incident to the September 1930 elections, but had been avoided at that time largely because the interests of the government and of the Reichsbank demanded the conciliation of foreign opinion. The gold and foreign exchange position of the Reichsbank in November 1931 was certainly weaker than it had been a year before, but on the other hand, the Bank was hedged about with the protection of the Hoover moratorium and the standstill agreement. The abandonment of the gold standard by England in September 1931 made it doubtful that Germany could maintain her own currency stability but lightened the transfer burden materially through the devaluation of gold currencies. Indirectly, and a more delayed reaction, was the fear of the effect of increased trade competition in foreign markets and the consequent forced reduction of imports and exports.

The November declaration was a decisive announcement, to Germany and to the rest of the world, that at all costs Germany would maintain currency stability and would control her balance of payments in the interests of the domestic economy. Hitherto, German policy had been to wait until the pressure of world events forced other nations to recognize her plight and to take steps to alleviate it. Now, she took the reins of control in her own hands. In accordance with the provisions of the Young Plan, the Bank for International Settlements appointed the second Basle committee to inquire into the German situation. This committee made a thorough investigation and reported that Germany would be unable to resume the payments on account of conditional annuities in July 1932. Its investigation into the short-term foreign credits of Germany increased the estimate of the first Basle committee by about 4.5 billion reichsmarks, or to a total of twelve billion reichsmarks at the end of July 1931, as opposed to the original estimate of 7.4 billions.[23] Of this, 4.8 billion reichsmarks were non-banking credits; six billion were covered by the standstill

23 See Table XXXI, p. 219, column 2.

agreement, and 1.2 billion had been withdrawn by November 20, 1931.[24] The committee not only declared that Germany would be unable to continue payments but strongly advised an international conference to consider the complete rewriting of the Young Plan. In spite of the opposition of France and the refusal of the United States to participate, in accordance with its ostrich-like policy of refusing to link war debts and reparations, a conference of creditor countries was called for January 1932 in Lausanne, Switzerland. Unfortunately, before this date a diplomatic storm was aroused between France and Germany resulting from a published remark by Dr. Bruening to the effect that it was obvious that Germany could pay no more reparations. Because of this, and because both France and Germany were holding important elections in the spring, the Lausanne conference was postponed until July 1932.

The American attitude prevented the discussion of the complicated question of war debts at Lausanne. The agreement in regard to reparations was subject to the approval of the respective governments, which actually was never obtained. To all intents and purposes, however, the Lausanne agreement was immediately in force. It abrogated the Young Plan and provided that all future payments by Germany on reparations account would be eliminated in return for three billion reichsmarks in 5% redeemable German government bonds deposited with the Bank for International Settlements. Such bonds were to be held by the Bank and not sold until July 9, 1935, after which date the Bank should undertake to sell the bonds in various international markets "as and when possible, in such amounts as it thinks fit, provided that no issue shall be made at a rate below 90%." Bonds not negotiated by July 9, 1947 were to be cancelled. The proceeds from the sale of the bonds would have been allocated to the creditor governments by agreement among themselves. Since this agreement was never

24 League of Nations, *World Economic Survey*, 1931/32, p. 80.

ratified, the status of reparations payments after Lausanne was simply that Germany did not pay any reparations.

Further standstill agreements in 1932 and 1933 with her foreign short-term creditors protected Germany from a repetition of the 1931 fiasco, but also isolated her more completely from free contact with the world's money markets. The second agreement, running from the last of February 1932 to the last of February 1933, prolonged the first agreement, but was slightly more favorable to Germany in that it gave to the Reichsbank more complete control over the payments. At the time the credit agreement of 1932 was signed, a 10% reduction in the total amount of credit lines outstanding was made. The report states that "the schedule of future repayments is to depend upon the transfer capacity of the Reichsbank which in turn must be largely dependent upon the developments in the German export situation. Instead of a fixed schedule of repayments at fixed dates it has seemed best to leave the future determination of what can be repaid to an advisory committee representative of the creditors, who will from time to time consult with the German authorities."[25] Provision was made for the consolidation of the short-term debt by giving the creditors the right either to convert their cash advances to German banks into ten-year 6% notes or to accept investments in German securities without the right of sale for a period of five years. Interest rates on the amounts covered by this standstill agreement were reduced in April and in July 1932. A special agreement covering 247 million reichsmarks of short-term debts of the States and municipalities was signed on April 9, 1932 and renewed in April 1933. The non-political international indebtedness of Germany was estimated by the League of Nations report for 1932-33 as follows:[26]

25 *Report of the Foreign Creditors Standstill Committee*, Jan. 23, 1932, p. 7.
26 League of Nations, *World Economic Survey*, 1932-33, p. 267.

TABLE XXXIII. NON-POLITICAL FOREIGN INDEBTEDNESS
July 31, 1931–September 30, 1932
(In billions of reichsmarks)

	July 31 1931	Nov. 30 1931	Feb. 29 1932	Sept. 30 1932
Short-term debt	13.1[a]	10.6	10.1	9.3
(including debt subject to standstill agreements)	(6.3)	(5.4)	(5.0)	(4.3)
Long-term debt	10.7	10.7	10.5	10.2
Total	23.8	21.3	20.6[b]	19.5

[a] This figure increases the estimate of the second Basle committee by 1.1 billion reichsmarks. See p. 230.

[b] Compare with figures in Table XXXII, p. 222.

The indebtedness as of September 30, 1932 was further analyzed as follows:[27]

(In billions of reichsmarks)

	Long-term	Short-term
Banks	1.234	6.442
Financial companies	.669	.524
Traders and industrialists	.203	1.563
Other creditors	8.075	.818
Total	10.181	9.347

The credit agreement of 1933 prolonged the 1932 agreement until February 28, 1934. A reduction of 5% in the usual credit lines was made at this time and certain features were added to smooth the working of the agreement. Provision was made for the payment by German debtors of fixed percentages of their short-term foreign debts in reichsmarks at stated intervals. These registered balances are held by the Reichsbank as trustee for the creditors. The balances may be used for long-term investments in Germany, securities, mortgages, and bonds,

27 League of Nations, *World Economic Survey, op. cit.*, 1932-33, p. 267.

or they may be used for tourist expenditures in Germany. "The Reichsbank has been given wide powers to control and direct the use of this new clause. Its working out . . . may well point the way to the easiest and safest roads at present open towards conversion and reduction of standstill indebtedness." [28] Interest payments on the total standstill indebtedness were reduced in the 1933 agreement, although this point was contested strongly by the creditors; interest for 1933 was to be 4¾% for cash credits and 3½% to 4½% for acceptances given to banks, and 5¾% for cash credits and 5% for acceptances given to industrial and commercial firms.[29]

The improvement in the Reichsbank's gold and foreign exchange position and in the trade balance of Germany that was hoped for when the first standstill agreements went into effect did not take place. World trade continued to decline in the face of currency depreciation and restrictions, tariff increases, quotas, clearing agreements, and the like. Germany managed an export surplus for the year 1932 of 1,080 million reichsmarks, as compared with 2,967 million reichsmarks in 1931. Her exports decreased 3,860 million reichsmarks and had to be offset by even greater import reductions, which in turn affected adversely domestic production.

The year 1933 was an important one in relation to Germany's contacts with the rest of the world. The third standstill agreement was concluded in February 1933. In March, the Hitler government came into power in Germany, to the apprehension of the rest of the world. In June, the World Economic Conference proved itself a farce and confirmed nationalism, economic trade barriers, and currency warfare as the inevitable economic policy of nations. Dr. Luther resigned as the president of the Reichsbank in March 1933 and Dr. Schacht—as the representative of the new government—

28 *Report of the Foreign Bank Creditors Standstill Committee*, Berlin, February 17, 1933.

29 By common consent this schedule of interest payments was also applied to short-term credits not covered by the standstill agreement.

once more assumed control. Dr. Schacht had attacked Reichsbank policy bitterly ever since the 1931 crisis. His contention was that the maintenance on the Reichsbank's balance sheets of borrowed money as a part of the Reichsbank reserve against notes in circulation concealed the true state of affairs from the German people and from foreign creditors; that the "conciliatory" attitude of the previous government in the repayment of credits was carried on at the expense of the internal strength of Germany. Quite consistently, therefore, his first step on resuming control of the Reichsbank was to repay in full the balance of the $100,000,000 central bank credit granted to Germany in June 1931, and on the basis of the reduced gold and foreign exchange position of the Reichsbank (274 million reichsmarks on June 30, 1933) to declare a complete moratorium on all transfers of foreign exchange—whether such payments were covered by standstill agreements or not.

This transfer moratorium became effective June 30, 1933 and necessitated further meetings and agreements of the German creditors. The results of these discussions are summarized in the Report of the Foreign Bank Creditors Standstill Committee of February 1934 as follows:

a) Fifty percent of the interest due on long-term and middle-term debts (with the exception of the Dawes and Young loans) would be transferred as it fell due; the remaining 50% would be covered by script which was salable to the Gold Discount Bank at 50% of its face value. This agreement lasted only until January 1934 when the amount of interest transferred directly was reduced to 30% and the script payments increased to 70% but the Gold Discount Bank agreed to purchase the script at 67% of its face value instead of the former 50%. This meant a total interest payment to foreign bond holders of 76.9% of their total claims.

b) The standstill creditors agreed to a postponement of capital transfers during the life of the 1933 agreement and to a further reduction of interest payments by ½% effective July 15, 1933.[30]

30 *Report of the Foreign Bank Creditors Standstill Committee,* February 1934.

The effect of the moratorium on Germany's international position was to cause a considerable amount of foreign ill-feeling, although the reduction of interest payments on long-term loans was in line with what was happening to long-term investments everywhere in the world. America herself, through currency depreciation, had cut the amount of interest payable on her securities held by foreigners by about 40%. Germany chose the more direct method of theoretical currency stability with enforced interest reductions. The moratorium meant, too, that Germany had entered whole-heartedly into an era of economic control in which every phase of the economic life was made to be consistent with immediate considerations of national economic welfare. In spite of all of these difficulties, the credits covered by the standstill agreement were materially reduced by February 1934. The provision for payment into blocked mark accounts had netted 406 million reichsmarks; 102 million reichsmarks were converted by their owners into long-term investments in Germany and 304 million reichsmarks had been disposed of through travelers checks, letters of credit, and the like. The repayments of the standstill credits up to February 28, 1934 are shown in Table XXXIV.[31]

The credit agreement of February 1934 continued the 1933 agreement as modified in July 1933. No reduction was made in available credit lines at this time, which remained at 2.6 billion reichsmarks for 1934; no provision was made for capital reduction and the lowered interest rates were maintained. The provision for repayment in blocked mark accounts continued in force and it was hoped that a considerable reduction in capital could be achieved in this manner.

Thus, if one looks back over Germany's successive steps toward complete national control over political and private short and long-term debt payments, one sees with each new foreign agreement greater energy exhibited on the part of the government and the Reichsbank in bringing the whole situation

31 *Report of the Foreign Bank Creditors Standstill Committee*, February, 1934, p. 5.

TABLE XXXIV. REPAYMENTS OF SHORT-TERM LOANS UNDER THE STANDSTILL AGREEMENTS [a]

July 31, 1931 to February 28, 1934
(In billions of reichsmarks)

Date	Total loans outstanding	Annual repayment	Total repayments after July 31, 1931
End of 1930 (loans similar to those covered by the standstill agreements)	8.00	—	—
July 31, 1931	6.30	—	—
Feb. 29, 1932	5.00	1.30	1.30
Feb. 28, 1933	3 85	1.15	2.45
Feb. 28, 1934	2.60	1.25	3.70

[a] These credit agreements have been renewed annually with only slight modifications. On March 1, 1937 about one billion reichsmarks were still unpaid.

into their own hands. Comparatively mild German control in the latter half of 1931, more successful negotiations in February 1932, cessation of payment on political debts in the summer of 1932, a credit agreement of February 1933 that consolidated the short-term debt and made provision for repayment within Germany, and the centering of all long and short-term debt payments (with the exception of Dawes and Young loans) in the Reichsbank by the summer of 1933—these were unmistakable signs of the transformation that was taking place in Germany. The problem of the control over foreign funds, which loomed so large in Reichsbank policy in the first seven years after stabilization, was solved for it—as far as inflow was concerned—in the summer of 1931; the repayment of those funds was, by the end of 1933, rigidly controlled by the Reichsbank and was furthermore made to serve the purpose of rebuilding the German economy. The control over the repayment of foreign loans became integrated with other control measures of the government and of the Reichsbank.

Germany's Progress Toward Controlled Economic Nationalism

Cut off from foreign funds, Germany was faced with the problem of readjusting her economic life to her own internal capital strength. Shrinking savings and bank deposits, public panic, paralyzed industries, a money and capital market incapable of activity, and public finances threatened with collapse had to be dealt with by the government. Fear of inflation was allayed by the strong stand taken against currency experiments. Dr. Luther announced in a public speech on October 2, 1931 that "our daily bread depends upon the maintenance of a stable currency." The prompt guarantee of all bank deposits by the government and the reorganization of the banking system affected bank withdrawals so that by February 1932 savings began to return to the banks; by September 1932 bank deposits showed an increase for the first time since the summer of 1931. Money market liquidity was attained, to a certain extent, through the cheap money policy of the Reichsbank which, in spite of a shrinking gold and foreign exchange reserve, increased its discount portfolios and reduced its discount rate by progressive stages until by June 1932 the rate was down to 5%. New banking institutions to deal with government paper offered opportunity for short-term investment and gradually the money market began to assume its old function in the life of the nation. In September 1932, the Bank for International Settlements renounced its right to interfere with amendments to Reichsbank law, and, by decree, the discount rate was permitted to fall below 5% even if the gold and foreign exchange position of the Reichsbank did not maintain a 40% coverage for notes in circulation. At the same time, the Reichsbank (again by governmental decree) was relieved of the necessity of paying a tax on notes in circulation in excess of the legal gold and foreign exchange requirement, and the government returned to the Reichsbank a portion of the tax that it had paid in 1931. The Reichsbank law of 1924 was thus coming to have less significance and the Reichsbank was gradually assuming the role of a government agent used as an instrument in shaping and carrying out government policy. Directly or indirectly, the rediscounting of treasury bills became one of the chief functions of the Bank. The control which the Reichsbank had over foreign exchange became one of the most effective instruments in centralizing the industrial and commercial life of the nation under the Reichsbank policy.

Control over foreign exchange led inevitably to control over exports and imports. By October 1931, all holders of foreign exchange of 200 reichsmarks and over had to declare their possessions at the Reichsbank and sell on demand at a fixed rate. It will be remembered also that at this time *all* new foreign exchange coming into the country had to be sold to the Reichsbank within three days. During November 1931, a series of presidential decrees was issued referring to the export industries. All exports had to be registered with the Reich Minister of Economics, who was granted the right to interfere with delivery. Exporters were required to direct their exports in such a way as to bring the maximum amount of foreign exchange into the country. By December 1931, a government board had been set up to regulate the export industries with broad powers over price, quality, and quantity. This led to government allocation of contracts; it led, also, to the suppression of all exports that depended upon the importation of raw materials, unless it was clear that Germany would have a net foreign exchange gain. Imports were also subjected to regulations that began comparatively mildly and increased in severity as the gold and foreign exchange holdings of the Reichsbank continued to shrink. Import regulation necessitated supplying imports to those industries selected by the board as vital to the welfare of the country; it meant also that certain industries which had depended upon raw material imports had to be subsidized by the government until the home market could supply the essential raw material. This in turn led to government bounties to stimulate home production. Signs of this regulation, which became more complete under the National Socialist government, were first felt in December 1931, when the government assumed wide police powers over the control of business of all sorts in the interests of the development of techniques and of broadening the base of the national economy.[32]

The law of December 8, 1931 is a sweeping document showing the extent to which the government was willing to go to bring the country back to some semblance of business prosperity. Speaking of this law, the League of Nations Report on Economic Conditions says, "There was no precedent outside of Russia for such drastic measures both of control of economic life and of sacrifices imposed on a whole people."[33] The law ordered a 10% reduction in the market price of practically all commodities entering into domestic commerce—steel, metal goods, building supplies, chemicals, paper, glass, textiles, foodstuffs, coal and the like. The Reich Minister of Economics was given the power to order further reductions or to grant exemptions as he saw fit. Interest rates on all long-term loans of the Reich, the States, the municipalities, banks (public or private), corporations, coöperatives, or individuals were ordered decreased from 8% to 6% — or, if bearing interest rates above 8%, they were to be decreased in the proportion of eight to four. Control over money market interest rates was placed in the hands of the Reich Commissioner of Banking who was to act in cooperation with the Bankers Association and the Reichsbank. Rents were decreased 10%, taxes on building property were lowered, other taxes were increased, salaries and wages, public and private, were decreased. Social insurance benefits of all kinds were materially reduced. Supervision and control over these measures was centered in the Reich Minister of Economics, whose decision was made final in all controversies.

32 Law of December 8, 1931, Chapter V, Article II; *Reichsgesetzblatt*, 1931, p. 716.

33 Page 80.

Labor creation programs were started in 1932, the most important of which was the plan whereby a certain proportion of taxes was remitted to an employer for each new laborer he hired. The tax bounties were paid in the form of Tax Exemption Certificates (*Steuergutscheine*) which became, according to the Reichsbank, "a credit instrument of many forms", but which served also the function of money in hand-to-hand payments. The Reichsbank reports that 1.3 billion of these were issued during 1932.[34] Moderate government expenditures for public works, amounting to 687 million reichsmarks in 1932, reduced unemployment to some extent, although it was not until 1933 that a large government public works program was put into effect. The total amount decided upon for public works at the end of July 1933 amounted to 5,494 million reichsmarks, but of this amount only 2,834 million reichsmarks had been actually appropriated by the end of the year.[35] A program for housing repairs and improvements whereby the landlord contributed four-fifths of the cost and the government one-fifth was started in September 1932, with a government contribution of fifty million reichsmarks. By the end of 1933, the contribution of the government totaled 450 million reichsmarks. In the spring of 1932, Dr. Bruening suggested the employment of workers in unused factories for the purpose of producing consumption goods to be traded among themselves. This proposal was not put into effect, but is interesting in the light of similar proposals made later in the United States. The government attack upon domestic depression problems, together with a slight improvement in other European countries and the general relief felt at the conclusion of the Lausanne conference, turned the tide of business depression in Germany so that the rate of decline in production and prices slowed down in the beginning of 1932, flattened out for most series in mid-

34 *Annual Report of the Reichsbank*, 1932.

35 Reichs Kredit Gesellschaft, *German Economic Development*, last half of 1933.

summer and by the end of the year showed a slight but marked improvement.

Economic depression reached its low point in Germany in the year 1932, when a gradual improvement began to show itself in some indices as early as February, and in others by August. The following statistics of industrial production and employment, the labor market and bankruptcies give a fairly clear picture of business trends.

TABLE XXXV. INDUSTRIAL PRODUCTION AND EMPLOYMENT [a]

Period	Industrial production 1928 = 100 Seasonal trend removed: Total index	Production goods	Consumption goods	Index of employment of industrial workers [b]
1929 yearly average ...	100.4	104.0	94.8	67.4
1930 " ...	90 1	88.7	92.3	56.2
1931 " ...	73.6	65.4	85.7	44.5
1932 " ...	61 2	50.2	77.6	35.7
1933 " ...	69.0	58.5	84.8	41.0
1934 January ...	79.1	72.1	89 6	44.4
February ..	82.4	75.4	93.0	46 5
March	84.2	77.6	94.1	50.0
April	86.4	80.0	95.9	53.1
May	89.1	84.3	96 3	55.2

[a] Reichs Kredit Gesellschaft, *German Economic Development,* first half of 1934.

[b] Based on utilization of working hour capacity.

The quarterly production index for 1931, 1932 and 1933 shows the following: [36]

36 Reichs Kredit Gesellschaft, *German Economic Development,* latter half of 1934.

1931 — 4th	quarter	62 3
1932 — 1st	"	55.7
2nd	"	57.1
3rd	"	53.5
4th	"	60.9
1933 — 1st	"	64.1
2nd	"	68.0
3rd	"	70.9

In the last quarter of the year 1932 there seems to have been a marked improvement in production which has continued to the present time. Unemployment reached its highest point—6,128,000—in February 1932; by the end of June the figure had decreased to 5,569,000 but by the beginning of 1933 there was again an increase to slightly more than 6,000,000. This figure began to decrease in March 1933, and by the end of the year the number of registered unemployed workers was reduced to 4,058,000.[37] Whether the registered unemployment for the year 1933 is comparable with that of the previous years is extremely doubtful. Racial and sex discrimination of the National Socialist government probably accounts for a large part of the decrease in registrations. On the other hand, a determined public works program and unemployment creation schemes had succeeded in drawing large numbers back to work. Then, too, the increase in the quasi-military organizations of the Nazi government absorbed large numbers of unemployed. There was also artificial increase in employment because of pressure on employers to hire workers as an act of party loyalty.

Bankruptcies also declined. The following table shows the average monthly bankruptcies and receiverships during the years 1928 to 1933. Although the average for 1932 was comparatively high, it was lower than the figure for the previous three years. Marked improvement was shown in 1933.

The foreign trade of Germany declined steadily after 1928, although for every year from 1929 through 1933 she had an

37 *Ibid.*

TABLE XXXVI. BUSINESS DIFFICULTIES [a]

Year	Number of bankruptcies	Number of receiverships and compositions
	Monthly average	
1928	665	266
1929	821	407
1930	945	587
1931	1,133	708
1932	717	521
1933 1st quarter	494	198
2nd "	344	136
3rd "	268	92

[a] Reichs Kredit Gesellschaft, *German Economic Development,* at the turn of 1933/34, p. 66.

export surplus. The first five months of 1934 show a very marked import surplus, due largely to the importation of raw materials and semi-finished goods. The decline in the value of Germany's exports and imports was probably not any greater than that in the rest of the world. In fact, Germany has shown a great ingenuity in continuing to export in the face of tariffs, quotas, decreased world purchasing power—and, in the year 1933, in spite of growing foreign antagonism to the government in power. The value of Germany's foreign trade from 1928 to 1933 is shown in the following table.

TABLE XXXVII. FOREIGN TRADE [a]

(Exclusive of gold and silver)

Year	Imports	Exports	Imports surplus (—) Exports surplus (+)
	(In millions of reichsmarks)		
1928	14,001	12,276	—1,725
1929	13,447	13,483	+ 36
1930	10,393	12,036	+ 137
1931	6,727	9,599	+2,872
1932	4,667	5,739	+1,072
1933	4,203	4,871	+ 668
1934 (5 mo.)	1,925	4,871	— 178

[a] Reichs Kredit Gesellschaft, *German Economic Development,* first half

Control over foreign exchange and the operations of the standstill agreements give Germany certain advantages in foreign markets. The numerous possibilities open to exporters to receive payment give German exporters an artificial advantage. They may be paid in German securities held abroad which sell at a lower price in foreign markets than in the German market, or in blocked marks which sell at a discount in foreign markets, or in script, which is worth its face value in Germany but only 67% of its face value in foreign markets. Exports paid for in any of these ways are known as "additional exports"; perhaps 50% of the exports of Germany fell under this category in 1933. This, however, means that from the point of view of the gold and foreign exchange position of the Reichsbank, the export surplus does not create a substantial addition to its actual reserve holdings. This method of financing exports increases the total export trade and, to some extent, increases the gold and foreign exchange available to the Reichsbank. As long as it serves the important function of keeping markets open that would otherwise be closed, it is—from Germany's standpoint—wholly desirable.

The German capital market contracted steadily after 1928. As early as 1930, the market showed itself incapable of absorbing new issues, and after the collapse of 1931 it was impossible to float any long-term obligations in Germany. The Reichsbank was powerless to help the capital market because of the legal restriction on dealing in government, State and municipal bonds. This was remedied in October 1933 by the change in the Reichsbank law, but the open market policy of the Reichsbank had scarcely begun to operate by the end of the year. In May 1933 the capital and money markets were put under the control of a government committee headed by the president of the Reichsbank with powers and duties calculated to bring about a revival in long-term investments. The business revival begun in 1932 had by 1933 affected prices of securities through the greater hope of business profit. It was hoped that the needed consolidation of the short-term government debt into a long-term internal loan could be carried out successfully in 1934. As a consequence of the capital market rigidity, the money market was made to bear the brunt of the heavy government expenditures. Although the bill portfolios of the Reichsbank decreased during 1932 and 1933, this represented, actually, a shifting of a portion of the rediscount burden to other government institutions. The Reichsbank remained in complete control of the money market. There was a change in the composition of the Reichsbank's bill portfolio—almost 50% of the total bills on December 31, 1933 were government bills having their origin in work creation schemes.[38] The policy of the Reichsbank continued to be one of "easy money" within the limits of price-level stability.

It is no longer possible to speak of currency stability for Germany if one means by the term a gold currency of a certain weight and fineness whose purchasing power is kept stable by the free flow of the monetary metal. By the end of 1933, the Reichsbank held 395.6 million reichsmarks of gold and foreign exchange as a cover for 3,645 million reichsmarks of notes in circulation — or a cover of 10.9%.[39] Prices, wages, rents, and profits are government prices fixed by the Reichsbank and the controlling boards and are made to serve the purposes of a planned economy under the direction of a central government with absolute authority. The new order is so completely changed that one can only say that the year 1933 marked the end of the old order and the beginning of the new.

The Third Reich

The political unrest that was felt in Germany in 1928 and 1929 had, by 1930, assumed startling proportions, as the September 1930 Reichstag elections showed. The events of the summer of 1931 added fuel to the political flame. The spring elections of 1932 showed the National Socialist Party as the

38 E. Wildermuth, "*Die Grundlagen der Arbeitsbeschaffung,*" *Deutsche Volkswirt*, June 15, 1934.

39 *Untersuchung des Bankwesens, op. cit.*, Part II, p. 454.

largest single party in Germany, although it was still not strong enough to represent a majority of the people. The foundations of the Bruening government were weakened, however, and in May 1932 Dr. Bruening resigned and Herr von Papen became Chancellor of the Reich. The Reichstag elections of June 1932 gave the National Socialist Party 230 seats as compared with the 110 that they had held since September 1932; this was 37% of the total number of seats.[40] This campaign was particularly violent — full of actual bloodshed and murder, which for the simple, stolid and peace-loving German people was an indication of the depth of passion aroused by the political issues at stake. The issue was clearly Dictatorship versus no Dictatorship. Inability to form a working majority in the new Reichstag following the June 1932 elections led to the dissolution of the Reichstag and the calling for new elections on November 6, 1932. The Hitler party lost strength in this election as did the Social Democratic Party, but there was a large gain in the strength of the Communist Party. Again parliamentary rule was deadlocked and the antagonism of Herr Hitler to Herr von Papen led to the appointment of General von Schleicher as Chancellor of the Reich.[41] The von Schleicher cabinet lasted only until January 28, 1933 when it was followed by a coalition cabinet headed by Herr Hitler. New elections were prescribed for March 5, 1933 in which the National Socialist Party gained 44% of the votes, with 288 seats in the Reichstag—an undoubted majority of seats, if not of popular vote. As is well known, the Reichstag on March 23, 1933, conferred dictatorial powers on Hitler and adjourned until April 1, 1937.

It is beyond the scope of this book to do more than to outline briefly the political developments which put an end to an economic system based upon individualism and laissez-faire

40 National Industrial Conference Board, *The Situation in Germany at the Beginning of 1933* (New York, 1933).

41 General von Schleicher was killed during the Nazi "purge" of June 30, 1934.

and led to one that was controlled and planned by an autocratic government. It has been apparent that the economic change began long before the Hitler government came into power and that the broad outlines of the present economic policies of the National Socialists were laid by the previous republican governments. It is a mistake to confuse the racial, economic, and nationalistic aspects of the Hitler government, as so many Americans are wont to do. The actual collapse of world internationalism began in 1929, while the foundations for that collapse were laid in the Treaty of Versailles. Germany's nationalism today may be more vocal than that of other countries—it is not more acute on that account.

In looking back over the economic development of Germany in the ten years from 1924 through 1933, the shift in government that has taken place seems incidental and more or less immaterial to the great interplay of social, political and economic factors of the post-war world. We are witnessing in Germany one nation's answer to the breakdown of the old ideas.

PART II

CONTROL POLICIES, 1924 TO 1933

CHAPTER VII

CONTROL OBJECTIVES AND TECHNIQUES

Up to this point we have been concerned wholly with an analysis of the major factors that condition credit control in Germany. An understanding of the organization of the banking system, the banking and business habits and customs that govern the money market, and the forces playing upon this organization through general economic development seems necessarily preliminary to any evaluation of the effectiveness of central bank control. Having painted in the background of credit control in Germany, we are now in a position to study in detail the major control techniques as used by the Reichsbank in the years under discussion. The analysis and evaluation of the technique is always made in the light of the particular objective or objectives desired by the Reichsbank.

Reichsbank Objectives

All central banks have certain minimum social objectives. These may be merely the obligations laid upon them in the charters that brought them into being, in which case precise statement of the objective lies in the Bank Act itself. Here, however, changing interpretations of the function of the bank are usually found as new events shape new situations that require action. These changing interpretations are often confusing, for they give the impression of new objectives when actually they are simply new methods for attaining the old ends. A study of any particular central bank requires an understanding of the basic objectives, social and economic, that the bank itself considers "desirable" as ends for the nation. Such a study is actually one of the bank's own conception of its role, and can best be determined through the public statements of those individuals entrusted with the practical management of its affairs. If, as in Germany, the management of the bank remains in the same hands for a fairly long period of time, these objectives, once formulated, tend to remain more or less constant. They may be refined or sharpened as new situations develop, but they are not easily abandoned. Central bank administrators who fail to formulate *for themselves* definite social ends find themselves at the mercy of circumstances, and their administration gives the impression of inefficiency or failure. A central bank cannot be said to have attained a control position until its basic objectives have been consciously formulated. This is one of the first steps in central bank control.

The control techniques developed by central banks are devices to bring about specific results which are "desirable" in view of the basic social objectives. The effectiveness of control can only be judged on the basis of the ability (or inability) of a particular technique to bring about the desired result. Given the end desired, one may criticize the technique used, its timing, its force, or its effect upon the total situation. One may inquire whether any other device would have been likely to have brought about the desired result more quickly or more completely. But one may never, legitimately, confuse the technique with the objective of that technique. Much of the confusion that exists today in the literature of central banking results from just such a failure to separate clearly the concepts involved.

In Germany, the formation of control policies lies in the hands of the Board of Directors of the Reichsbank. This group of men has been remarkably stable. The Board members of the old Reichsbank continued with the Bank through the trying days of the inflation and remained members of the Board after the Bank's reorganization in 1924.[1] The presidency of the

1 "The Board of Directors of the Reichsbank today is the old Board. The authority of the Board is, with exceptions of a purely formal character, the same as it formerly was. The policy of the Reichsbank is decided today wholly through the Board of Directors, as it has been since May 1922—again with certain exceptions." Dr. Schacht, testifying before the Banking Commission, Oct. 21, 1926. *Die Reichsbank, op. cit.*, p. 129.

Reichsbank changed twice in the ten years under discussion: in 1930 Dr. Luther replaced Dr. Schacht; in 1933 Dr. Schacht again resumed the office. Of the six members of the Board in 1933 (with the exception of the president), five had been members continuously for at least eleven years;[2] one was newly appointed in 1933. Furthermore, no new additions had been made to the Board of Directors of the Reichsbank during the entire period of ten years prior to 1933. As far as the management of the Bank is concerned, we have, then, a group of men who worked continuously together in shaping its policy. The president of the Reichsbank has usually been the mouthpiece of the Board in declarations of fundamental objectives.[3]

In one important sense, from 1924 to 1929 the Board of Directors of the Reichsbank was not a free agent. Control over the stability of the reichsmark was placed in the hands of a foreign Note Commissioner who had the right at any time to force the Reichsbank to take whatever steps he considered essential to guarantee currency stability. "Stability" was interpreted here to mean stability of the reichsmark in the foreign markets of the world, not stability of domestic pur-

2 The five members of the Board were Drs. Dreyse, Bernhard, Vocke, Friedrich, and Schneider.

3 Dr. Schacht, president of the Reichsbank from December 22, 1923 to March 15, 1930 and again from April 23, 1933 to the present time, has not only been the spokesman for the Reichsbank but he has borne, personally, the brunt of the attacks upon the institution. Any economic institution with broad policies of social and economic control and with the determination to enforce its will is bound to run counter to popular belief at times and to be the subject of violent recrimination. This is particularly true in Germany in the decade under discussion. The Reichsbank as an institution was unpopular. Its objectives for the economy frequently collided with vested interests and with the hope of immediate profit. Although it is impossible wholly to neglect the character of the personnel of the Reichsbank and the personal motivations of the Directors, it is my purpose here to use the statements of Dr. Schacht and others connected with the institution as expressions and interpretations of Reichsbank policies. In so far as possible attention will be focused on institutional objectives and techniques, and the criticism will be carried on on the basis of broad social and economic forces playing upon the formulation of the objectives and the selection of the techniques.

chasing power. It seems evident, however, that the Board of Directors of the Reichsbank was in sympathy with this obligation. The Note Commissioner and the Directors worked in entire harmony as long as this provision of the law was in force, and the maintenance of the stability of the reichsmark in the foreign markets of the world remained the basic objective of the Reichsbank even after the Young Plan relieved the Bank of foreign controls.

Currency stability in terms of the gold parity, then, was the underlying purpose of the Reichsbank, a purpose that took precedence over all other considerations. Dr. Schacht has made this clear time and again.

> The Reichsbank must undertake to restrict credit whenever the supply of gold and foreign exchange falls too low, because the permanent value of the mark, *its maintenance upon a gold parity,* must and will remain the first principle.[4]
>
> It was the Reichsbank's goal to re-establish a free gold market in Germany as soon as possible, a market where gold could be bought and sold exclusively as the natural relations of supply and demand dictated. It never made practical use of the Dawes Plan provision entitling it to suspend payment in gold of its notes, and when the Young Plan was adopted it cancelled the formal authority to suspend gold payments which still existed.[5]

Dr. Schacht's belief in a gold currency rested upon his belief in its effectiveness in international trade. He testified before the Bank Investigation Committee of 1926-1929 as follows:

> I believe that gold covering provisions are, of course, only theoretical. But theories in the last analysis serve practical purposes, and I can only say that the system of gold currencies covered partially by gold and partially by bills of exchange, under the present world interconnections of trade and production, is the only one possible. But I am ready to take up any other theory, sight

4 Schacht, *The End of Reparations, op. cit.,* p. 142. Italics are mine.

5 *Ibid.,* p. 143.

unseen, (*unbeschen*) that is adopted by America and England. (Applause)[6]

In response to a question as to the value of a gold currency for domestic purposes, he replied:

> For domestic trade I believe that the Chartal theory has a certain meaning. I believe that in a closed economy it would be possible through legislative measures to control the means of payment.[7]

While this latter statement is interesting in view of the developments in Germany since 1933, the former statement is more representative of the basic theoretical attitude of Dr. Schacht during the period from 1924 to 1930, and it seems also to have been held by Dr. Luther during his presidency of the Reichsbank from 1930 to 1933.

Although the Reichsbank was committed to the policy of holding the reichsmark stable in the foreign markets of the world, both by the obligations of the 1924 Bank Act and by its own inclination, it was not willing to interpret stability only in terms of the foreign exchanges. *The maintenance of stability of the domestic price level* was a second objective of the Bank and one that seems to have been almost as important as the stability of the exchanges.

> The history of the Reichsbank after the war is an excellent, an almost complete picture of the multitudinous and difficult problems of money and currency policy. Foremost among them is the search for a stable standard of currency, i. e., for a standard of value

6 *Die Reichsbank, op. cit.*, p. 155.

7 *Ibid.* The Chartal theory has its origin in Knapp's *State Theory of Money*, which attained a wide popularity in Germany. Although there are many variations of Chartalism, the belief common to all is that "Money is a creature of the State. To the sovereign national power money normally owes its being,—its having value, and its par circulation." It believes also that "the national monetary system must be unified and so constructed as to carry out what the State intends." Howard S. Ellis, *German Monetary Theory* (Cambridge, Mass., 1934), pp. 37 and 38. The entire second chapter of this book should be read for a complete discussion of Chartalism.

which will constitute an invariable measure for the value of all other goods.[8]

That stability of the domestic price level was thought of primarily as a stable relationship between German prices and world prices is brought out in the last sentence of the following quotation:

> Any heavy increase in the currency circulation, even with full gold cover, is bound prejudicially to affect the development of prices; and experience shows that any rise in prices, even if due to quite natural causes arising in connection with the supply of commodities or from the conditions of production, is nevertheless regarded by wide circles of the population as a symptom of inflation. The cover percentage cannot and should not, therefore, be taken by the Reichsbank as the sole criterion of its policy. . . . The currency circulation of a country must be kept at all times in a proper proportion to the extent of the country's economic activity. . . .The test for the volume in circulation is the development of the general level of prices, in comparison more particularly with the development in other gold currency countries.[9]

Nevertheless the desire to maintain internal stability of the price level was an objective of the Reichsbank as early as 1924. The annual report for that year contains the statement that "the quotation of the mark on foreign markets and the rising domestic price level was observed with concern because of inflationary tendencies and danger to the stability of the mark." [10] It frequently happens, of course, that the maintenance of stability of a currency in terms of the foreign exchanges and stability of the domestic price level are incompatible. The central bank, then, must choose between the two, unless it is clever enough to devise techniques to attain both ends. The Reichsbank showed itself both ingenious and firm in its disinclination to give up these two objectives, but stability of the exchanges always took priority over stability of the domestic price level.

8 Schacht, *The End of Reparations, op. cit.*, p. 131.

9 *Annual Report of the Reichsbank*, 1927, pp. 6-7.

10 Page 3.

A third objective of the Reichsbank was *to direct domestic and foreign capital to "productive" ends.* It is difficult to determine the Reichsbank's interpretation of the word *productive.* It is a debatable question as to what constitutes a productive use of capital. For the Reichsbank, the word seems to have had different meanings at different times and to have been used differently for domestic capital and for foreign capital. In the case of foreign loans, productivity seems to have meant to the Reichsbank at times the ability of the borrower to meet interest and amortization charges out of the profits of the industry, and at other times the ability of the foreign loan to further the well-being of the total economy through an increase of exports over and above those necessary to service the loan and/or a decrease of imports. One finds, for instance, the following statements which seem to give the word the first meaning:

> In view of the lack of capital in Germany, the necessity for recourse to foreign borrowing is self-evident; and, in so far as production can be satisfactorily increased with the help of foreign loans, there is no objection to be made. In the case of private enterprise, it may be assumed that this condition is usually fulfilled since private undertakings are obliged to make accurate estimates of the possibilities of profit. There are, of course, objections to be urged against private no less than public loans, where it is a case of excessive or unprofitable borrowing, having regard to the possibility of future changes in the conditions governing prices and production.[11]

The criterion here expressed seems to be profitability with due regard to the probable future course of business. Later, Dr. Schacht again stated this same idea:

> The Reichsbank had to see that foreign capital was brought in only for such productive purposes as would assure payment of the interest and amortization charges.[12]

11 *Ibid.*, 1927, p. 6.

12 Schacht, *The End of Reparations, op. cit.*, pp. 148-149.

In the bank investigation of 1926-1929, however, statements were made by Dr. Schacht and others which seem to use the word in the latter sense. It seems clear, too, that as far as the activities of the Advisory Bureau for Foreign Loans (*Beratungstelle*) were concerned, the definition of productivity changed from that expressed in the first instance to one directly concerned with the trade balance. Since the Reichsbank was responsible for the establishment of the Bureau and participated in its control throughout the years of its existence, the Bureau's interpretation of productivity may be looked upon as instigated by or at least concurred in by the Reichsbank. Although in 1924, when the Bureau was first established, productivity was identified with profitability, in 1926 the following definition was issued:

> The word essentially means that the loan must directly or indirectly serve the total welfare of the Reich, be it through an increase in exports or a decrease of imports. The issue is not to be decided upon the basis of local interests.[13]

And again, in answer to the following question put to him by a member of the committee, Dr. Norden (a member of the *Beratungstelle*) answered decidedly, "Yes":

> If I understand you correctly you include under the word "productive" not merely domestic productivity but the whole transfer process?[14]

It seems fairly clear, then, that by 1926 the "guidance of foreign capital into productive uses" meant for the Reichsbank the encouragement of those loans that led to an increase in exports and/or a decrease of imports. This, of course, leaves a wide margin of interpretation in the actual use of control techniques. In a country such as Germany—and particularly the Germany of the post-inflation period—it would be fairly easy to prove that any loan would *indirectly* lead to a favorable

13 *Die Reichsbank, op. cit.*, p. 97.

14 *Ibid.*, p. 183.

trade balance. As we study the Reichsbank's use of control techniques in the following chapters, we shall try to find further guides to this phase of its credit policy.

If the Reichsbank seems to have been not wholly explicit and consistent in its use of the word productivity as applied to foreign loans, it was even less so when attempting to define a productive use of domestic capital. I have been able to find no explicit statement as to what a "productive" use of domestic capital meant to the Reichsbank. Indirectly, however, through a study of the actual steps taken by the Bank in particular situations, some light may be thrown upon its interpretation of the word. It must be remembered that in the years immediately following the inflation Germany was starved for working capital. The small resources available had to be carefully shepherded if they were to serve the broadest possible interests of the whole economy. "Productivity", in 1924 and 1925, certainly meant non-luxurious expenditure and non-speculative expenditure. This interpretation held during the first period of credit restriction, and the frequent warnings of the Reichsbank in later years as to the essential poverty of Germany would lead one to the conclusion that productive uses of capital still meant an economical use of raw material.

A fourth objective of the Reichsbank was *the maintenance of stability of money market interest rates*. In the rebuilding years of the German economy, 1924-1926, this took the form of devising means to rebuild the money market itself, particularly the private discount market. After 1926, the Reichsbank endeavored to regain the pre-war rate relationships on the money market.[15] One finds many definite statements of this objective in the annual reports of the Reichsbank, and also in the statements of Dr. Schacht.[16]

A fifth objective of the Reichsbank was *to provide cheap money for legitimate trade, industry, and agriculture*. To a cer-

15 See above, pp. 152-155.

16 See Chapter V.

tain extent, this interest was combined with the desire to lower and stabilize money market rates of interest.

> The first efforts of the Bank were still of necessity directed to supporting the tendency (which was beginning to make headway in the market) towards continued reduction of the interest level, and to facilitating the increasing supply of capital so as to stimulate as much as possible the activities of agriculture, industry, and trade.[17]

However, the Reichsbank frequently took steps independent of the money market to provide credit facilities for agriculture, trade, and industry.

These five standards were the major guides to Reichsbank policy in the years from 1924 to 1933. One can, however, discover other objectives that were either closely related to the ones mentioned above, or were outgrowths of them. The Reichsbank was, for instance, interested in *improving treasury finance and the character of expenditure.* Scattered public funds, high taxes, and luxurious public expenditure interfered with the major objectives of the Reichsbank in many ways. Scattered public funds made the task of rebuilding the money market more difficult and made it harder to direct capital to "productive" uses; high taxes took away needed capital from "legitimate" trade, and at the same time encouraged careless and even luxurious spending. Luxurious expenditure, such as the building of municipal baths and swimming pools, was frowned upon because it was not a "productive" use of domestic capital and, if it was carried on directly or indirectly with foreign funds, it certainly did not lead to an increase in the trade balance.

> A uniform administration of all these funds [public funds] in the interests of the public remains nevertheless a necessity; unfortunately this necessity is not always appreciated as yet. . . . Only a central money market is in a position to distribute its funds to all parts of the Reich. The Reichsbank has increased the possibilities

17 *Annual Report of the Reichsbank*, 1926, p. 4.

in this direction by the introduction of its telegraphic clearing system. Thanks to this system . . . the administration of public money is, so to speak, rationalized, and the excessive formation of reserves and the scattering of resources is prevented. . . . Germany is not rich enough to allow herself the unprofitable employment of capital.[18]

Speaking of the "mistaken financial policies" of the governments in power after 1924, Dr. Schacht says:

The more strongly the leaders of a central bank feel their responsibility for the currency and credit problems which are fundamental to all economic progress, the more emphatically will they insist upon economy and simplicity. . . . There was no excuse for the national government, the provinces, or the municipalities to borrow money abroad to make up their budgetary or treasury deficits. . . . When will the German people be strong enough to finance its enterprises out of its own economies?[19]

The Reichsbank was concerned throughout the entire ten years in *improving banking standards.* It was instrumental in putting into effect the improved monthly balance sheets and required, for its own use, additional and confidential data from the reporting banks. Its 1927 annual report contains the following statement:

Negotiations between the Reichsbank and the banks and giro institutions regarding the improvement and extension of the publication of interim balance sheets resulted in the following arrangements at the beginning of 1928. The bi-monthly balance sheets are in principle to be replaced by monthly balance sheets, and the time limit for publication will be reduced. The wording and arrangement of the balance sheets has been improved in various ways and rendered more precise. The new form is such as to be uniformly applicable to private credit banks, public banks, girozentralen, and

18 *Annual Report of the Reichsbank*, 1927, pp. 5-6. The last sentence of this quotation also illustrates the allusions made frequently by the Reichsbank to the poverty of Germany.

19 Schacht, *The End of Reparations, op. cit.*, pp. 152-157.

mortgage banks. An agreement has also been come to, under which additional data will be furnished regularly to the Reichsbank in explanation of the balance sheet figures.[20]

In 1928, the Reichsbank again cooperated with the banks in putting in a uniform system of checks which materially simplified the clearing process. In addition to these formal improvements, however, the Reichsbank was even more concerned with the question of the liquidity of bank assets. Dr. Schacht testified before the Bank Investigation Committee as follows:

> I believe that the principle of liquidity must be maintained under all circumstances. This is just as important for the private banks as for the Reichsbank. I do not believe that the mere desire for the higher profit of the current account business is an acceptable banking standard.[21]

That the Reichsbank did not hesitate to enforce its standards of liquidity on the banks is shown by its action in May 1927 when stock speculation was disturbing the money market and interfering with the basic objectives of the Reichsbank. Although one might hold that prevention of stock speculation was itself an objective of the Bank, the control of speculation was, in this instance (the only time the problem presented itself in the ten years studied), put on the basis of liquidity.[22] In general, in the post-inflation period, the whole question of bank liquidity was related to the Reichsbank's attitude toward foreign loans; or perhaps, more correctly, one of the objections of the Reichsbank to foreign short-term funds was the danger to the banking system of building loans and investments on the basis of foreign short-term loans.

Very soon after stabilization, the problem of the liquidity of the German banks was again pressing, but from a different point of view than formerly. Ever since 1924, the incoming stream of foreign loans, especially in so far as they were of a short-term nature,

20 Page 9.

21 *Die Reichsbank, op. cit.*, p. 141.

22 See above, p. 192.

had an increasing influence on the liquidity of the banks and, through the banks, on the Reichsbank. From the year 1924 on, the Reichsbank incessantly took its stand in opposition to this flood of foreign short-term money.[23]

Not only did Dr. Schacht address the Central Association of German Bankers on this subject as early as December 1924, but he also continued to warn them of the danger. In March 1927, he made a speech to the Government in which he pointed out that in case foreign short-term loans were suddenly withdrawn, there would be no way of meeting the withdrawal except by reliance upon the Reichsbank. Among other things he said:

> . . . there is only one single liquid reserve in Germany, the note press of the Reichsbank. . . . We must by all means return to the pre-war situation where liquidity was not guaranteed only by the note press of the Reichsbank but was served also by the liquid reserves of the banks, which reserves were not dependent solely upon the central note bank to make them liquid.[24]

The post-war liquidity of the German banks has already been discussed.[25] To improve this situation was undoubtedly one of the Reichsbank's objectives.

To study this list of consciously formulated objectives is to become impressed with the magnitude of the task that the Reichsbank set itself to accomplish. It conceived of its role as one which placed it at the center of the entire economy, aiding and furthering those ends that it considered socially desirable and hindering those that in any way threatened "healthy economic growth." In short, it desired to:

1) Maintain currency stability in terms of the foreign exchanges,
2) Maintain the stability of the domestic price level,

23 Reichsbank Director Nordhoff, "The Measures Taken by the Reichsbank to Improve Publicity, Liquidity, and Solvency of the Banks," *Untersuchung des Bankwesens, op. cit.*, Part I, Vol. II, p. 254.

24 *Ibid.*, p. 255.

25 Chapter III, pp. 79-83.

3) Direct domestic and foreign capital to "productive" ends,
4) Maintain the stability of the money market,
5) Provide cheap money for "legitimate" trade, industry, and agriculture,
6) Improve treasury finance and the character of public expenditure, and
7) Improve banking standards.

It is no doubt true that the condition of the German economy, and of the banking system in particular, provided, in 1924, the stimulus to the assumption by the Bank of broadly-conceived control objectives. However, if one remembers that the years 1924 and 1925, when these objectives were formulated by the Reichsbank, were years when central bank theory was comparatively young, one is conscious of the fact that the Reichsbank was blazing a new trail in central bank control. It had, at the time, no world experience to guide it nor to suggest to it what the function of a central bank in a paralyzed national economy *should* be. It simply took upon itself those obligations that it considered essential for the well-being of Germany. Whatever success or failure the Reichsbank had in the actual attainment of its goals, it was courageous in its formulation of basic policies and consistent in its efforts to carry them out. These policies were not always acceptable to the German people. Dr. Schacht says in this connection:

> About these purposes of the Reichsbank, a bitter battle has been fought before the German people for years. The Reichsbank was charged with overstepping its prerogatives and concerning itself with matters which were political and outside of its sphere. Nothing could be more mistaken. It may be that in a country where the money and capital conditions are normal, a central bank should confine itself in the main to manipulating the discount rate in the usual manner, adapting it to the normal periodic fluctuations of business. It was thus before the war when the business of the world moved in channels which had been formed gradually and organically in the course of decades. But the war and the mad peace terms reshaped conditions from the ground up in the defeated countries,

> and in the victorious lands caused such structural economic changes that there too one may detect the effort of the central banks to affect the course of the money economy with other means than by the usual changes in the discount rate. . . . I was constantly accused of hampering the economic reconstruction of Germany by holding foreign capital at arm's length, and of impairing Germany's credit standing abroad.[26]

Opposition at home was only one of the obstacles in the way of success. Impoverishment of the economic system, smaller territorial resources, foreigners with capital only too willing to lend because of the hope of profit from the higher German interest rates, a heavy reparations burden—these, and other factors which we have already discussed, were the setting in which the Reichsbank had to work. Furthermore, as Dr. Schacht replied to an American banker who sought to impress him with the importance of his bank by citing tremendous figures, "It seems to me no feat to carry on a banking business with such amounts of money. Come over to Germany and show us how to run a bank without money."[27]

Reichsbank Control Techniques

Whether the directors of a central bank believe in quantitative or qualitative control techniques is probably dependent on their acceptance or rejection of the quantity theory of money in one form or another. The quantitative approach to monetary theory has not permeated the continent of Europe to the same extent that it has England and the United States. Probably, too, the willingness of a central bank to assume responsibility for achieving broad social objectives which seem to be outside of quantitative control is also related to the more basic social and economic convictions of the administrators of the Bank law. Individualism and laissez-faire are native to the English soil and were never whole-heartedly welcomed in Germany.

26 Schacht, *The End of Reparations, op. cit.*, pp. 149-150.
27 *Ibid.*, p. 134.

Dr. Schacht was no ardent believer in the quantity theory of money, although he accepted its broad implications. Testifying before the bank inquiry, he said:

I should like to remark that gazing fixedly and with fascination (*faszinierte Hinstarren*) solely upon the quantity of money in circulation will not provide one with the main index for discount policy. I support the doctrine of the quantity theory in no way. However, the quantity theory cannot be summarily dismissed. It must be observed, but its corrective lies in the velocity of circulation of money and this applies not only to paper and metal money but much more to Giro money. If Giro money grows, paper and metal money can be decreased and vice versa. It is evident that money in circulation has meaning only in so far as it influences price levels. There is no question (to put the matter simply for clarity) that a note circulation of twenty billion reichsmarks will lead to a price increase while one of two billion will lead to a price decrease. One must watch whether the means of payment changes in correspondence with normal and natural production and trade or whether it increases or decreases in response to speculative turnover or speculative investment of productive capital.[28]

One finds in the above statement a repetition of the idea mentioned above—that "normal and natural" production and trade must be the guide to Reichsbank policy and that "speculative turnover and speculative investment of productive capital" must be considered undesirable. The reason for this lies in the concept of the velocity of circulation of money. An increase in the velocity of circulation of money which bears no relationship to the increase of production and consumption of goods leads to an undesirable increase in price levels that should be checked by the central bank, if possible. One further quotation from the testimony of Dr. Schacht may make even more clear his attitude toward the "art" of central bank control. He continued:

28 *Die Reichsbank, op. cit.*, pp. 146-147. The quantity of cash in circulation in Germany is usually between five and six billion reichsmarks.

The art of Reichsbank policy rests not in the employment of fixed arithmetical or geometrical indices nor in quantity relationships. If this were the secret of discount policy one would be required to call to the guidance of the Reichsbank a professor of mathematics. (Professor Norden—"An adding machine would be much better." Applause.) According to our belief, policy rests much more on the fact that one cannot deal with natural relationships too simply, but that their control must be well timed in order that favorable economic tendencies can be furthered and unfavorable ones checked. The fixing of a discount rate in a free market is itself, in a certain measure, influenced by the development of the total economic situation.[29]

From these statements it is clear that the president of the Reichsbank was interested, primarily, in the objectives to be attained and that he was willing to use whatever means could be devised to carry out the purpose of the bank—as envisaged by him. It is clear, too, that Dr. Schacht had a realistic conception of central banking problems and possibilities. He was not prejudiced in favor of any one means of control, and seemed to see his task as an "art" rather than a "science". Because of the complexity of a "total economic situation" and the diversity of the factors playing upon a national economy, central bank control must be willing to be creative and flexible if it is to attain its ends. He saw the advantages and the limitations of purely quantitative control devices. Since he conceived of his task as the qualitative guidance of the whole national economic system, it follows that qualitative methods would also be employed whenever necessary.

The control techniques used by the Reichsbank in the ten years under discussion were discount rate, lowering of the buying price for gold, credit restriction, bargaining, warnings (with or without the threat of more drastic action), and publicity. In addition to these, the Reichsbank engaged in a wide variety of activities which it is difficult to classify but which

29 *Ibid.*, p. 147.

were certainly undertaken with a view to achieving, in whole or in part, one or more of the basic social objectives listed above.

The traditional tools of central bank control have been the discount rate and open market operations. Open market operations, in America, may refer either to purchases or sales of bank acceptances in the open market or to purchases or sales of government short-term obligations and government bonds. As a matter of practice, purchases and sales of bank acceptances play little or no part in Federal Reserve open market activities. In Germany, the purchase and sale of bank acceptances is a part of the regular business of the Bank and, because of the charter provisions requiring the Reichsbank to keep two-thirds of its bill portfolio in bills bearing three signatures, the larger proportion of its bills must come as rediscounts from other banks. The purchase and sale of bank acceptances is, therefore, included under the discount business of the Bank. The purchase and sale of government bonds was denied to the Reichsbank as a control device because of the definite limitations placed upon such transactions in the 1924 charter. The Reichsbank was not permitted to purchase government bonds on its own account; it could purchase a limited amount for the investment of its pension funds, but this was an amount so small as to be practically negligible. Also, it will be remembered, the Reichsbank lombard privilege was denied to government bonds unless they were to mature in one year. The 1924 charter also prohibited the purchase of Reich short-term treasury bills by the Reichsbank. In 1926, the charter was amended to permit the rediscount of 400 million reichsmarks of such bills, but no use was made of this privilege by the Reich until 1928. At any rate, the total amount of short-term treasury bills permitted was so small in relation to the total amount of money outstanding that the purchase and sale of such bills could scarcely be said to offer opportunities for quantitative pressure on the money market. Of the traditional tools, then, the Reichsbank had only the discount rate to depend upon. Since the function of an open market policy is to bolster up discount policy (or vice versa), the Reichsbanks's discount rate as a technique of control was deprived of one of its major props. This fact must not be lost sight of in any evaluation of the Reichsbank's use of its discount policy. We are so accustomed to think of discount policy plus open market operations as a control technique that it is easy to fall into the error of misjudging the Reichsbank's use of discount policy alone.

The control technique frequently employed by the Bank of England — decrease of the buying price of gold — was also open to the Reichsbank. The Reichsbank was required by law to convert her gold into reichsmarks at the rate of RM 2,784 per kilogram of fine gold. It had, however, the right to purchase gold at less than the legal price if it seemed desirable for it to do so. The Reichsbank occasionally took advantage of this means of control. Credit restriction, or credit rationing, was the most drastic tool of control used by the Reichsbank and probably the most effective. Its merits and demerits have aroused endless discussion in Germany. We shall analyze the Reichsbank's use of this technique in a later chapter. It is desirable to point out here that the mere existence of the tool of credit restriction as a possible control device was sufficient in later years to give greater weight to the Reichsbank's warnings and moral suasions.

In many ways, a study of the "other activities" of the Reichsbank during the years 1924 to 1933 proves very enlightening to one interested in the place of a central bank in an economic system. These were not so much tools of control as they were ingenious interferences in the economic life of the nation at strategic points in order to bring about desired results. They are indicative of the seriousness with which the Reichsbank approached its task, of the resourcefulness of the Bank, and of its willingness to go to any lengths to achieve its purposes.

CHAPTER VIII

THE DISCOUNT POLICY

1924-1933

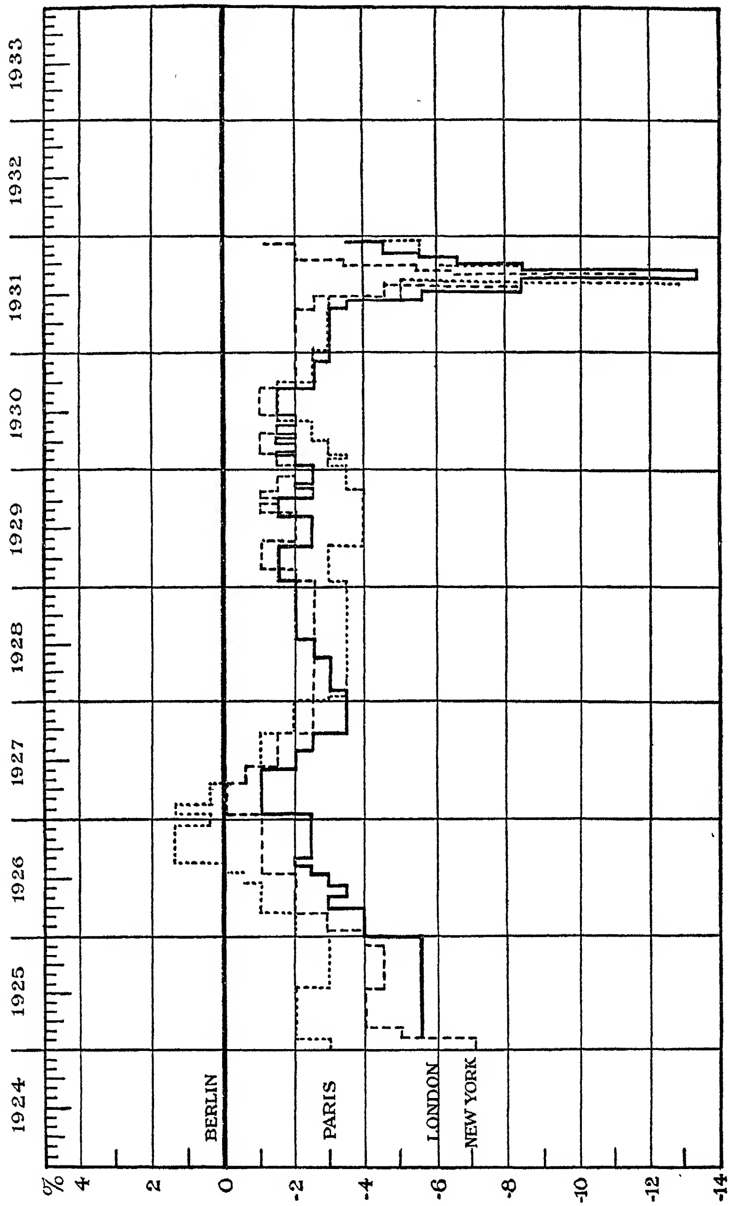
THE discount policy of a central bank lies at the center of any discussion of control techniques. Prior to the war the discount rate, backed up by open market operations, was the only tool of credit control relied upon by central banks. Although in the past few years changes of far-reaching significance have been introduced to control the supply of money and to cushion domestic economies against the effects of foreign monetary disturbances, there is nevertheless a deep-rooted attachment to bank rate as a control device. During the entire period covered by this study bank rate was still looked upon as the keystone of central bank policy.

A study of the discount policy of the Reichsbank during the years 1924 to 1933 brings into clear focus the difficulties that confronted the Reichsbank and that prevented its discount policy from attaining, except for one short interval, even a semblance of practical efficiency. It has been customary for English and American writers to dismiss this experience with bank rate on the grounds of the "abnormality" of the post-war German situation. This uncritical acceptance of bank rate as a control technique and the desire to class as abnormal the ten-year effort of the Reichsbank to make its discount policy effective in Germany are attitudes that only retard the process of reaching any real understanding of control techniques. It is my purpose here to analyze in the first place those factors, both international and national, that prevented the discount policy of the Reichsbank from functioning in a "normal" manner, and, in the second place, to analyze the actual use made by the Bank of its discount rate. Such a study should, on the one hand, throw some light on the truth or falsity of the basic assumptions implicit in the theory of bank rate as a technique of central bank control, and, on the other hand, bring to light whatever effectiveness the tool possesses in spite of its limitations.

The Reichsbank Rate in Relation to Foreign Bank Rates

One of the conditions essential to the smooth functioning of the central bank discount rate is its ability to attract or repel foreign funds. Control over the supply of money, in a nation belonging to a world economy which uses gold as the international adjustor of foreign exchange and price level differentials, is not purely a domestic matter. According to classical theory, an increase in the discount rate of a central bank tends to encourage foreign funds to remain in the country, and through its effect on the short-term rate of interest attracts fresh foreign capital. At the same time, the higher bank rate increases the cost of credit and therefore reduces the demand. The decrease of bank money in circulation has a depressing effect upon price levels; imports therefore decrease, exports increase, and there is a further flow of gold into the country; the supply of money is thus increased, bank credit expands, prices go up, exports decrease, imports increase, and equilibrium is restored. One must recognize in this theory the difference between the primary effect on short-term foreign funds and the secondary long-run effect upon the domestic price level. Prewar central bank control with its emphasis upon the identity of national interests with international interests undoubtedly focused its attention upon the effects of bank rate changes on short-term foreign funds. If one shifts the emphasis, however, to the effects of bank rate changes on the domestic price level the implications contained in the theory are obvious: 1) the central bank must be in a position to increase or decrease its bank rate *relative to* the bank rates of other countries; 2) the initial effect of attracting or repelling foreign funds must be insignificant in relation to the total supply of money and bank credit in circulation, so that the effect on price levels through changes in interest costs can be obtained; 3) the trade balance

CHART III. REDISCOUNT RATES OF LONDON, NEW YORK AND PARIS PLOTTED AS DEVIATIONS FROM THE BERLIN RATE, 1925-31



must respond to relative price level changes; and 4) gold must flow freely between nations.

The "normal" functioning of bank rate as a control device thus presupposes an integrated international economic system whereby gold and goods flow between nations in response to "natural economic laws". The theory upon which it rests reflects the conditions present in the world from 1850 to 1914 and particularly does it reflect the English economy and the position of the Bank of England as the central bank controlling the world's money markets. Critical examination of bank rate as a control technique in the post-war period must begin with an acknowledgment that the whole world was "abnormal" in the sense that gold was not permitted to flow freely between nations but was itself subjected to control. Increased gold supplies (particularly in America) were not allowed to increase the supply of money in circulation and hence price levels. International trade was disrupted by arbitrary interference with the gold-price-level mechanism, by tariffs, trade quotas, and subsidies, as well as by war debts and reparations.

Germany's "abnormality", however, went further in that it included not only the failure of the trade balance and gold flows to govern price level changes, but that it included the *inability* of the Reichsbank to establish a bank rate sufficiently in touch with the bank rates in other countries to gain a differential advantage through its own rate increases or decreases; it included also the abnormal responsiveness of the German economy to the flow of foreign funds, so that bank credit in circulation responded more to the presence or absence of foreign funds than to the Reichsbank discount rate.

In Chart III,[1] foreign bank rates are plotted as deviations from the Reichsbank rediscount rate from 1925 through 1931. The year 1924 cannot fairly be included, for in that year international distrust of the German money and banking system prevented the free flow of funds; the same thing is true from the middle of 1931 to the end of 1933. An examination of the

1 Plotted from statistics in *Vierteljahrshefte zur Konjuntur Forschung*, 1924-1933.

interrelationships of central bank discount rates in the six and one-half years in which the German economy was integrated with other countries shows that, for the entire period, the New York rate was well under the Reichsbank rate. The London rate, with the exception of the first three and one-half months in 1927, when it was equal to the Reichsbank rate, was consistently lower than that of Berlin. The Paris rate was also lower than Reichsbank rate with the exception of the eleven months from the middle of July 1926 to the middle of June 1927. Not only were the rates in New York, London and Paris lower than the Reichsbank rate, but they were lower by wide margins, so that for the most part the Reichsbank would have had to decrease its rate from 1½% to 3½% to bring it into even approximate equality with foreign bank rates. Some allowance must be made, of course, for the risk factor, although after the stabilization of the currency on a gold basis this was probably not much greater for short-term funds flowing toward Germany than for those flowing toward other countries. For the entire period then, except for the first three months of 1927, the discount rate maintained by the Reichsbank had the power to attract foreign funds but had no power to repel them.[2]

One frequently meets the argument in criticisms of Reichsbank policy that the Reichsbank should have maintained a discount rate lower than the rates in other money centers especially after 1926. This, it is argued, would have discouraged foreign funds and deprived the domestic economy of that means of speculation. Production would have increased and the lower German costs would have stimulated exports. This is the familiar pre-war reasoning in regard to discount rate but seems to me wholly untenable as applied to Germany at any time in the ten years under discussion.

In the first place, the Reichsbank was required by law to maintain a 40% gold and foreign exchange cover for its notes

2 After the monetary crisis of 1931, of course, the whole situation was changed because the German market was no longer attractive to foreign funds. The Reichsbank rediscount rate lost all international significance.

in circulation. The cover percentage was above 40% for notes in circulation but if one includes bank notes (Reichsbank notes plus those of the four note-issuing banks), rentenmark notes, and Giro deposits, the gold and foreign exchange percentage was 40.5% on December 31, 1926, 33% in 1927, and 44.4% in 1928. There is the formal justification for the maintenance of the excess cover for rentenmark notes and Giro deposits which involves the justification (if any) for the gold cover provision itself.

In the second place, under the terms of the Dawes agreement, Germany was required to make fixed payments on reparations account. The Reichsbank had to provide the necessary gold and foreign exchange for these payments. In view of their size, the excess gold and foreign exchange was comparatively small and lower rates, which actually discouraged foreign funds and expanded bank notes to the full legal limit, would have meant that reparations could not have been met without danger to the currency. In view of the conditions of German industry at the time and foreign trade barriers it was doubtful that the expansion of exports—granting such an expansion is a result of lowered rates—could have been rapid enough or large enough to meet reparations payments.

In the third place, the entire argument presupposes that the central bank rate is the controlling rate in the money market and that all other rates will automatically be regulated by the central bank rate. As we have seen, the struggle to gain control of the money market was one primary aim of Reichsbank policy but the reëstablishment of the pre-war rate structure was accomplished by the Reichsbank not by *setting* money market rates but by *following* them. Then too, the decline of the domestic bill market in relative importance meant that as a control device the Reichsbank rediscount rate could bring pressure to bear only on a small part of the money market. As was brought out in Chapter IV, the bill business of the Reichsbank fluctuated widely, giving the Bank no certainty that at any one time the amount of bills in the market would be sufficient to give effectiveness to the Bank's discount rate. In relation to the domestic money market the Reichsbank was not free to follow the rules laid down in the pre-war period as proper for discount policy.

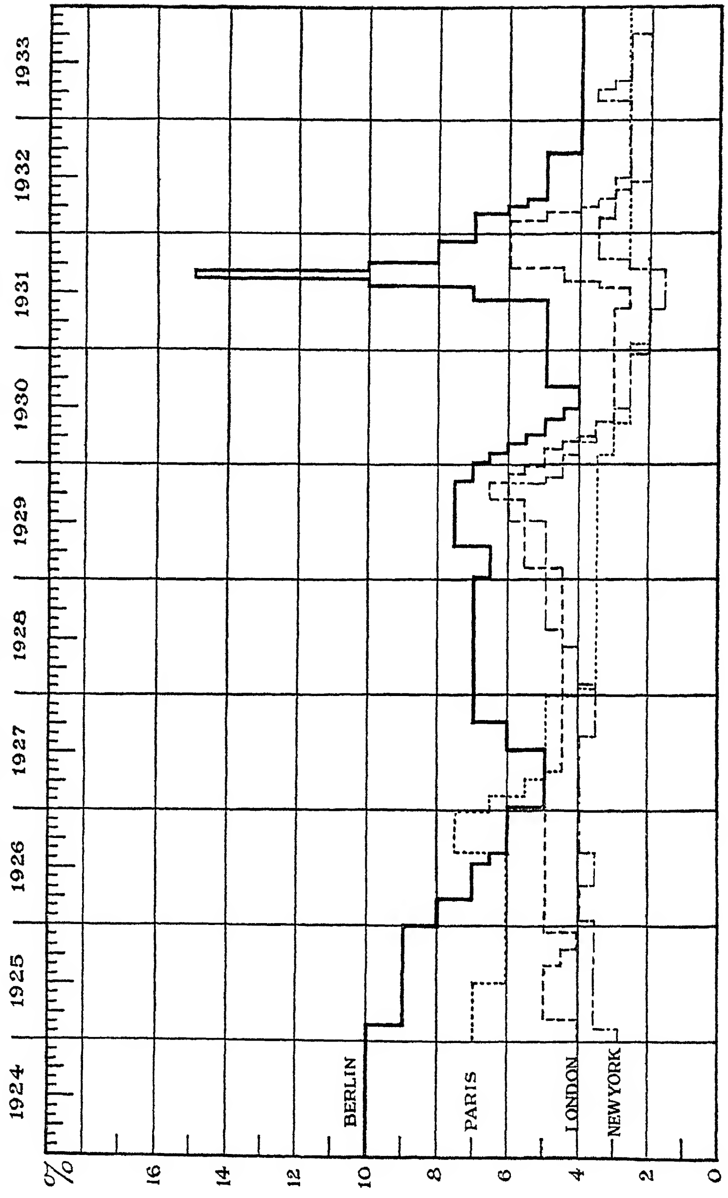
The following detailed analysis assumes this lack of freedom on the part of the Reichsbank.

A further study of the movement of the Reichsbank rate in relationship to rate changes of other central banks (Chart IV) [3] brings out the fact that at no time in the entire period did the Reichsbank rate move consistently in the same direction as the rates of London, New York and Paris, with the exception of the eleven months from October 1929 to September 1930. From 1925 to the middle of 1927 the Reichsbank lowered its rate six times—a progressive decrease from 10% in January 1925 to 5% through the first six months of 1927; five of these decreases were made in the year 1926. During the same period the London rate fluctuated between 4% and 5%, the New York rate between 3% and 4%, and the Paris rate between 5% and 7½%. The Reichsbank rate was increased twice in the last six months of 1927—from 5% to 7½%; the London and Paris rates remained stable at 4½% and 5% respectively; and the New York rate decreased from 4% to 3½%. Stability in international bank rates was maintained throughout 1928. In the latter half of 1929 and until September 1930, all bank rates moved downward rather closely together. In September 1930, the Reichsbank again raised its rate while other bank rates remained stable. After the crisis of 1931, the Reichsbank rate was not influenced by foreign bank rates.

While it is true, of course, that all central bank rates are determined by conditions inherent in the domestic economy, a positive correlation is to be expected in the movement of international money rates if gold and goods flow freely between nations. In spite of the post-war disturbances to currencies,

3 See footnote, p. 272.

Chart IV. Bank Rates, London, New York, Paris, and Berlin, 1924-33



international trade, and gold flows, there was a high degree of integration between the London and New York bank rates from 1925 to 1931; at no time were the rates more than 1½% apart and although there was a constant fluctuation there was a tendency for the rates to approach each other. The comparison of the Reichsbank rate with the rates of other countries brings out clearly the extent to which the German economy was cut off from that of other nations.

The theory of bank rate as a control device over the supply of money in circulation in a particular economy identifies the domestic and international interests. Thus, an increase in the discount rate must be capable of decreasing the quantity of bank credit in circulation in spite of the immediate stimulus to the flow of foreign funds, in order to change the price level so as to stimulate exports and discourage imports. These conditions were not present in the German economy from 1925 to 1931. The Reichsbank rate, higher than the rates in other money centers, was a reflection of the factors surrounding the German economy and separating it from the rest of the world. The most important factor influencing the domestic money rates in the years immediately following stabilization was shortage of working capital, a shortage which could not be supplied from domestic savings. There was, therefore, a constant temptation to German producers to replenish working capital from foreign sources; there was also the temptation to German banks to expand bank credit on the basis of foreign loans. This situation was peculiar to Germany and led to a further "abnormality" in her bank rate as a tool of credit control. The ability of Reichsbank rate to attract foreign funds but not to repel them, together with the demand for working capital, created a situation in which the Reichsbank discount rate lost its power to control the supply of money and bank credit in circulation. The Reichsbank was frequently placed in the position of desiring to control the domestic market through an increase in bank rate but of being prevented because the additional stimulus to the flow of foreign credits toward Germany would have aggravated the very situation that the Bank wanted to correct.

In spite of the fact that the Reichsbank's use of its bank rate was constantly affected by the greater height of the Reichsbank rate in relation to foreign money rates, this attraction of the Reichsbank rate for foreign funds was as frequently an advantage as a disadvantage. In January 1929, the Reichsbank *consciously overlooked* the fact that a rate decrease might retard foreign funds, which tends to show that the Reichsbank was not influenced at this time by the effect of this rate decrease on foreign money in Germany. In the autumn of 1929, bank rate changes were frankly made for the purpose of tempting foreign capital to remain in Germany. The necessity of fixing bank rate with a view either to discourage or to encourage foreign capital was, of course, a sign of the essential weakness of the German position and of bank rate as an independent control technique. However, if one accepts these conditions as a part of the basic limitations of freedom of Reichsbank control, one finds that the Reichsbank was frequently enabled to use them to its own immediate advantage.

The Reichsbank Rate in Relation to the Short-Term Interest Rates

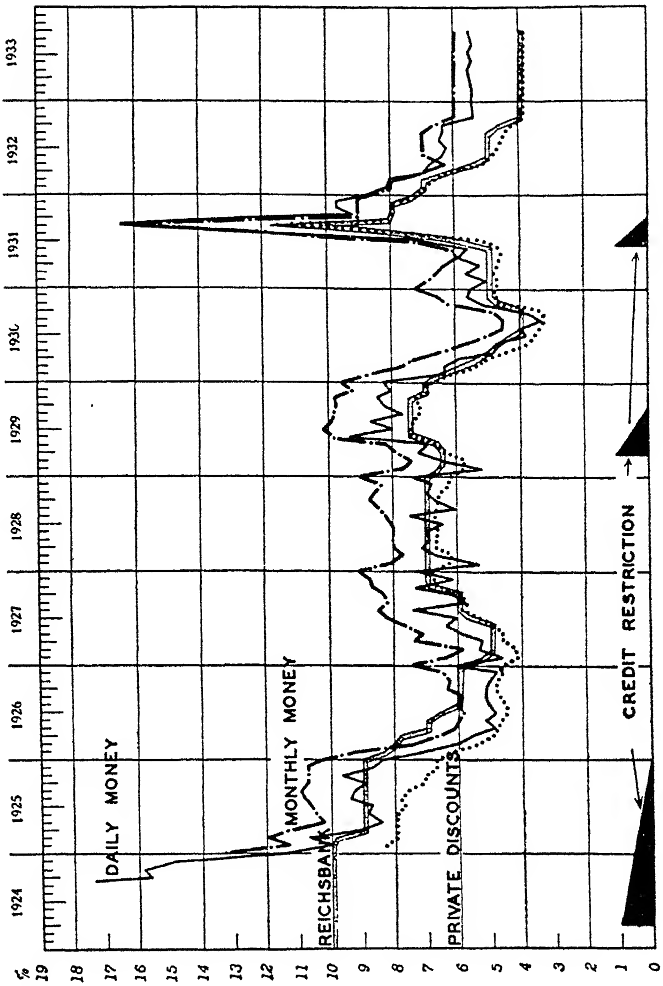
If changes in the central bank discount rate are to operate as causal factors in the decrease or increase of bank credit in circulation, the discount rate of the central bank must control money market rates of interest. This is not a statement of the obvious fact that discount rates higher than the money market rates of interest will operate as a check on bank credit expansion, and rates lower than the money market rates as a stimulus. It is rather the posing of the question which was uppermost in the report of the German bank investigation of 1926-1929—"How far does the Reichsbank discount policy affect the interest level of the whole economy, and what influence has it on the rate structure of the money market?"[4] Of these two questions the latter is probably of greater importance, for, as is well known, it is the interrelationships of money market interest rates that guide the flow of funds into specific channels

4 *Die Reichsbank, op. cit.*, p. 60.

rather than the absolute relationships of one rate to the bank rate. An analysis of the effect of the Reichsbank discount rate on money market rates of interest in Germany presents little to uphold the thesis that changes in bank rate lead or cause money market interest rate changes.

A study of the Reichsbank discount rates and the rate for daily money on the Berlin bourse (Chart V) shows that in the year 1924 these two rates bore no consistent relationship to each other. By the middle of September the daily money rate began to drop appreciably; after a slight rise at the beginning of October 1924, it dropped until, by January 1925, it had reached the level of the Reichsbank rate—10%. It may be true that the "cheap money" policy of the Reichsbank acted as a pull toward lower daily money rates, but it took thirteen months to accomplish this result. During this entire period the Reichsbank was not relying upon discount policy, but upon credit restriction as a control device. Its cheap money policy was therefore purely nominal in the sense that only a limited amount of central bank credit was available at the cheaper rate. The Bank, itself, however, hoped to establish its own rate as the "norm" for the economy. After February 5, 1925, the daily money rate followed the Reichsbank rate downward, but while the Reichsbank rate remained stable at 9% throughout 1925, the money market rate fluctuated below and above the Reichsbank rate; the daily money rate began to move downward in September 1925 and was decreased consistently until April 1926, when it reached the low point of 5%. Credit restriction was abandoned early in 1926, but even after this date one does not find the central bank rate leading money market rates. The Reichsbank rate followed the money market rate downward from 9% in January 1926 to 6% in early August. Although the daily money rate was pulled up to 6% in December 1926, it again dropped in January 1927 and was followed by the Reichsbank rate; again the money market rate increased sharply in the early months of 1927 and was followed by an increase in bank rate. In the latter part of 1927 and 1928 the daily money rate fluctuated

CHART V. MONEY MARKET RATES IN BERLIN, 1924-33[1]



[1] Reproduced from Emil Puhl, "*Wiederaufbau des Geld- und Kapitalmarktes,*" *Untersuchung des Bankwesens, op. cit.,* Part I, Volume II, p. 219.

about the bank rate, sometimes above and sometimes below. In 1929, however, one finds again an increase and a decrease in the Reichsbank rate *following* the rate for daily money. The progressive bank-rate decreases in the latter part of 1929 seem to have led rather than followed daily money rates downward, but from September 1930 to the beginning of the crisis of 1931 Reichsbank rate increases followed the money market rates. It is only in 1932 and 1933 that one finds the Reichsbank rate consistently lower than the rate for daily money. The Reichsbank discount rate can scarcely be said to have been the causal factor in the changes in the rate for daily money on the Berlin bourse from 1924 through 1931.

If one studies the rates for monthly money on the Berlin bourse with the same degree of thoroughness, one finds that these rates were in much closer harmony with the money market rate for daily money than with the Reichsbank rediscount rate. Only the private discount rates from the middle of 1927 to the end of 1933 moved in entire harmony with the Reichsbank rate. One is therefore forced to the conclusion that, while there was a certain degree of integration between the various rates in the Berlin short-term money market, the Reichsbank rate was not by any manner of means the controlling rate. It seems rather to have been itself controlled by the money market rates of interest and by the factors that were in turn controlling them. To a certain extent this is simply a restatement of the situation outlined above: that the German economy was abnormally responsive to the flow of foreign funds and that the Reichsbank discount rate, therefore, lost control of the supply of money and bank credit in circulation. Such an analysis, however, brings out more clearly the essential weakness of the discount rate in Germany as a tool of control over the domestic money market.

If one turns now to the question of the influence of the Reichsbank rate on the rate structure of the money market, one finds an entirely different situation. The Reichsbank seems to have been completely aware of the fact that " the note bank is not in a position to decide the interest rates of the country wholly independent of the position of the free market, but must resign itself to great price differences and must accommodate itself to the movements in the free market." [5] Nevertheless, through "accommodating itself to the movements in the free market" it was able to establish an integration of money market rates that maintained a structural relationship to each other from 1927 through 1933. In 1924, the Reichsbank deliberately set its bank rate at a point lower than money market rates in order to provide cheap credit for legitimate industry. There was no structural relationship between market rates in this year. By 1925 a greater degree of form is observed in the inter-rate relationships, but the span between the lowest and the highest rates—the private discount rate and the rate for monthly money—was still very wide. During these two years the Reichsbank was not relying on its discount policy as a control device but, while restricting credits, was hoping to establish its bank rate as the "norm" for money rates in the entire economy. In 1926 one finds a still greater decrease in the span between the money market rates, but there was no permanent relationship maintained among them. From 1927 onward, however, the private discount rate was constantly at or below bank rate; the rate for monthly money was consistently above the rediscount rate; and the rate for daily money fluctuated about the Reichsbank rate, sometimes above and sometimes below. This was a structural relationship different from the pre-war money market in that the rates for both daily and monthly money were then usually above bank rate. Also, the private discount rate in the pre-war period tended to show more elasticity and to be less dependent upon the Reichsbank rate.

Although more attention has been paid in studies of bank rate to individual money market rates and their responsiveness to bank rate pressure, it seems possible that individual rate reactions are less important to an understanding of central

5 *Die Reichsbank, op. cit.*, p. 63.

bank control than the changes in money market rate relationships. It has always been held that changes in the central bank discount rate affect the short-term rates of interest and *therefore* increase or decrease the cost of credit. The "cost of credit" is, however, a very broad term covering all possible time variants in the use of funds from the twenty-four hour use of daily money to the long-term borrowings on the capital market. It is always possible for borrowers to shift their demands from one type of borrowing to another; in fact, they are constantly doing so. If changes in bank rate affect all interest rates in the money market at the same time and to the same degree, there is no change in the relative costs of borrowing in the various markets; there is simply a change in the absolute cost. This is obviously the assumption of classical theory. If, on the other hand, changes in bank rate disturb the structural rate relationships in the money market, one may simply find funds shifted from one type of use to another. From the standpoint of central bank control, the shifting that takes place may produce results wholly unexpected before the absolute cost effects of bank rate change make themselves felt in increases or decreases in the total amount of bank credit. A refinement in the technique of central bank control will probably pay more attention to the effect of bank rate changes on the rate structure of money markets than to its effect on individual rates.

In spite of the Reichsbank's inability to control money market rates of interest, it was able to establish and to maintain an integrated interest rate structure that gave to its discount policy a certain degree of control over the domestic situation. In the last analysis, no money and banking system can remain unaffected by the credit policy of the note bank. In Germany, the traditional dependence of the banks on the Reichsbank at month-end settlement day meant that, at these times, these banks were forced to come to the Reichsbank for support. Central bank credit could be obtained either through the sale of bills, through lombard loans, or through the sale of foreign exchange. Although the discount rate is only the bill-buying rate of the bank, if all other money market rates maintain a steady relationship to bank rate, bank rate may be said to exercise some measure of control over the domestic use of short-term funds.

The "abnormality" of the discount policy of the Reichsbank therefore, arose, for the most part, from the degree to which the factors surrounding the German post-war economy departed from the theoretical norm. Germany's abnormality was shared by the entire post-war world in so far as it was related to or was caused by the post-war disruption in the gold-price-level trade-balance mechanism. In so far as Germany's balance of payments was determined by reparations payments her situation here was even more desperate than that of other nations. The attraction of the high German short-term interest rates for foreign funds added further to the difficulties of the central bank and created a situation in which the absolute cost of credit was determined by the presence or absence of foreign loans in Germany. In spite of the unfree discount rate in post-war Germany, the experience of the Reichsbank cannot be dismissed as incapable of throwing any light on the practical efficiency of bank rate. A further analysis of the actual use made by the Reichsbank of its discount policy, hampered as it was, is essential before any judgment can be made as to the Reichsbank's use of its technique, as to the relationship of the German experience to that of other countries, or as to the general theory of credit control through bank rate increases or decreases.

"Cheap" Money Policy, January 1924 to June 1927

From the beginning of 1924 to June 1927, the Reichsbank used its discount policy to provide cheap money for legitimate trade, industry and agriculture. The bank rate was not relied upon as the sole tool of control during 1924 and 1925, but was used as a control device supplementary to the policy of credit restriction. In 1924, the Reichsbank set its bank rate at 10% in spite of the fact that money market interest rates for daily and monthly money averaged for that year 87.6% and 28.3% respectively,[6] because "in the transition months of the year 1924 the Reichsbank saw its task to be one of supporting the whole economy by cheapening credit through the note bank." [7] Through the Gold Discount Bank, the rate for foreign bill discounting was set at an even lower point—at 8%—in order to aid the export business. During 1925, the bank rate was lowered only once—to 9% on February 5. Although money market rates of interest had begun to drop during 1924 and 1925, they were still considered too high by the Reichsbank. The policy of credit restriction was therefore maintained and was used as a means of exerting pressure upon money market rates of interest at strategic points, but during the year, credit restriction was gradually eased in favor of control through the discount rate.

By January 1926, credit restriction was given up and the discount policy of the Bank became the main tool of credit control. According to the annual report of the Reichsbank, the discount policy during 1926 was guided by the desire to reduce money market rates of interest and to facilitate capital supply to agriculture, industry and trade.[8] The Reichsbank lowered its bank rate four times between January and July; to 8% on January 12, to 7% on March 27, to 6½% on June 7, and to 6% on July 6. It will be remembered that Germany was going through a period of business depression during 1925 and the first half of 1926. The large supply of short-term funds on the German money market was, during this period, a reflection not only of the influx of foreign funds, but also of the inability of the German economy to absorb capital as rapidly as it was made available. During 1925 the Reichsbank made no

6 *Die Reichsbank, op. cit.*, p. 61. The daily money rate stood far above the monthly money rate because there was at this time very little demand for monthly money and a very great demand for daily money. See above, Chapter V, p. 170.

7 *Ibid.*, pp. 60-62.

8 *Annual Report of the Reichsbank*, 1926, p. 4.

effort to adjust its discount policy to alleviate or to control the depression. The Reichsbank considered the slump in business a part of the "purging process" essential to healthy recovery of the German economy from the fever of inflation. By 1926, however, the Reichsbank was ready to permit its discount rate to follow money market rates of interest downward. Its desire to establish a cheaper rate structure throughout the entire money market led it to bring pressure to bear upon the banks to decrease their charges to borrowers. The 1926 Annual Report of the Reichsbank states: "The charges of the private banks and other money lending institutions for interest and commissions followed [the decreases in Reichsbank rate] in some cases only under pressure from the Reichsbank which negotiated for the purpose with the local banks and with the central organizations of the parties concerned." [9] It might be said that the Reichsbank had no discount policy during the year 1926 except to stand by and to permit foreign funds to flow into the German market and to allow its own rate to slide down after the domestic money market rates. This policy, however, was strictly in accordance with the best traditions of central bank policy in periods of depression, except, of course, that the Reichsbank achieved money market ease through its negative attitude rather than through active efforts to stimulate the market.

The Reichsbank rate was held at 6% throughout the latter half of the year 1926 but was decreased to 5% on January 11, 1927. Although "it would have been possible to have decreased the bank rate at the end of 1926, it was considered *wiser* to wait until the end-of-the-year settlements were safely past." [10] When the decrease was finally made on January 11, it was made for the purpose of discouraging foreign funds. This is the first time the Reichsbank was in any position to expect suc-

9 These *commissions* during the stabilization period were exorbitant; in some cases equaling the interest rate and even as late as 1926 amounting to 25-50% of the interest rate.

10 *Annual Report of the Reichsbank,* 1927, p. 3. Italics are mine.

cess from a bank rate change made for such a purpose. It is interesting to note that this is the only instance of the use of bank rate for this purpose in the entire ten years under discussion. If one examines foreign bank rates during the first eight and one-half months of 1927, one finds that the London bank rate was equal to the Reichsbank rate of 5%; the Paris rate was above the German rate, and the New York rate was only 1% below the Reichsbank rate. Therefore, it is understandable that the Reichsbank decrease in rate "had the expected result" of discouraging foreign funds. This advantage was, however, only maintained for five or six weeks, for by the middle of February money market rates of interest began to go up in response to factors present in the internal economy, such as the greater demands of expanding industry for funds, and the large capital demands of public bodies. By April, foreign funds began to be attracted by the German stock exchange and the situation became critical. The Reichsbank in this emergency abandoned its discount policy as a means of control and used what might be called "moral suasion plus threats." [11] Its bank rate, however, remained at 5% until June 10, when it was raised to 6%.

In general, the Reichsbank abandoned bank rate from 1924 to June 1927 as an effective means of central bank control. To a large extent, this was due to the attitude of the Reichsbank toward its own role in the German economy, a role which was one of qualitative guidance of funds rather than quantitative. There were three emergencies during this period. The first lasted from April to July 1924, and was characterized by a threat to the stability of the mark which grew out of the speculative fever of the previous years. The Reichsbank, in this instance, abandoned discount policy completely, in favor of credit restriction. The second emergency was the business depression of 1925-1926, when the Reichsbank stood aloof and held its bank rate at 9% throughout 1925 because it believed that the slump was "good" for Germany. What little notice

11 See above, Chapter V, pp. 191-193 and below, Chapter XI, pp. 377-379.

it did take of the situation was handled through an easing of its credit restriction policy. The third emergency was the stock market crisis of April-May 1927, when again the Reichsbank abandoned control through the quantitative pressure of bank rate in favor of the threat of credit restriction. Only in the latter instance was the abandonment of bank rate conditioned by the effect of bank rate increases on the flow of foreign funds. The only use made of discount policy in 1926 was to permit bank rate to follow money market rates of interest downward throughout the first half of the year, evidently in the belief that the purging process of the depression had gone far enough; in the latter half of the year, the Reichsbank permitted its rate to lag behind money market rates of interest and, in consequence, lost touch with the market.

We are not interested at this point in a criticism of the Reichsbank's attitude toward its discount policy as a control technique. We are interested in reaching an understanding of the effectiveness of this particular technique in the light of the Bank's own objectives. During this entire period the Reichsbank attempted to use its discount policy to aid it in the provision of cheap money for trade, industry and agriculture. The real question is, therefore, the extent to which this objective was achieved by the Reichsbank's use of its discount policy. Certainly in 1924 the Reichsbank, as the sole credit support of the entire economy, was making cheap credit available (although in restricted quantities) through holding its bank rate well under the market rates of interest. In 1925 and 1926 it is more difficult to separate the effect of discount policy from the effect of foreign funds. On the whole, the cheaper money market rates were not attributable to Reichsbank policy, but were due rather to the presence of foreign funds and to the depression in German industry. However, simply through Reichsbank accommodation to the money market situation, the bank rate was used as an encouragement rather than a discouragement of cheaper credit. Until January 1927, the Reichsbank did nothing to discourage the amount of foreign funds in the German market,[12] and then the action of lowering the discount rate was taken because the Reichsbank felt itself capable of supplying the demand for credit at the cheaper rate of 5%—which it hoped would prove to be the normal rate for the Berlin market. Even in the failure of the Reichsbank to use its bank rate as a means of control over the stock market crisis of April-May 1927, there was a certain consistency with the objective of cheap credit for "legitimate" industry and agriculture. An increase in discount rate at that time would have tightened credit for all users while failing to check foreign funds, which were the source of the stock market speculation—the "illegitimate" use of funds. Germany had at this time an unfavorable trade balance, which was actually drawing foreign exchange out of the Reichsbank even while the banks were using foreign funds on the bourse. This belief on the one hand in the illegitimacy of bourse speculation and on the other hand in the desirability of good trade bills in bank portfolios was implied by Dr. Schacht in answers to questions put to him by the Bank Investigation Committee on June 21, 1927. He came closest to a definite expression of this attitude when he said: "If a favorable Bank policy is maintained in Germany (and not one in which the foreign exchange policy of the Reichsbank is limited by bourse speculation) the banks will always be in a strong liquid position with good trade bill portfolios . . . and each customer will be able to get credit according to his needs." [13]

It seems evident, therefore, that in the light of the objectives of the Reichsbank, the discount policy aided and abetted cheap credit from 1924 to the middle of 1927. In this sense it was a reliable tool of credit control for the Reichsbank. In making this estimate one must, of course, give up all large claims for discount policy; it was a crippled tool of control

12 That is, through its discount policy. It was sending out constant warnings against foreign borrowing and seeking to control, through the *Beratungstelle*, public foreign borrowing.

13 *Die Reichsbank, op. cit.*, pp. 204-205.

at best. It was a control device not capable of supporting the central bank, but only of supplementing its other policies. From the middle of 1927 onward, the Reichsbank rested more heavily upon its discount policy.

The Discount Policy From June 1927 to March 1929

On June 10, 1927, the Reichsbank raised its discount rate to 6%. The increase at this time was made to protect the gold and foreign exchange covering of the reichsmark. Because of an unfavorable trade balance, reparations, interest and amortization charges on the foreign debt, the rising phase of the business cycle and the repayment by the German banks of foreign short-term credits, the Reichsbank lost 900 million reichsmarks of gold and foreign exchange from December 1926 to the end of June 1927. At the same time, its bills and lombards increased by 1,100 million reichsmarks.[14] This increase brought the Reichsbank rate into closer touch with the money market rates of interest. Although the daily money rate showed extreme sensitiveness to foreign funds, it fluctuated about the Reichsbank rate and remained below it only for short periods of time. The expansion of business forced the banks into greater dependence on the note bank.

In October 1927, the Reichsbank increased its discount rate from 6% to 7%. The increase at this time was made, according to the Reichsbank, not only because of the increasing dependence of the banks on the Reichsbank, but because the domestic price level was increasing when the price levels of the rest of the world were either stable or decreasing. The Annual Report for 1927 stated that because the price levels in England and the United States did not increase during 1927 there was, therefore, need " for reserve in further currency expansion " in Germany; this fact was " a contributing factor in the decision to raise the discount rate." [15] There is some doubt about the correctness of this assertion. The wholesale price level in the

14 *Ibid.*, p. 66.

15 Page 6.

United States increased from ninety-four in July 1927 to ninety-seven in September, where it remained throughout the rest of the year. The price level of Great Britain increased from 141 in July to 142 in September 1927; in October it decreased to 141 and in December to 140. The price level of France decreased from 126 in July to 120 in October; in November and December the index number increased to 121 and 123 respectively. The Austrian price level decreased from 140 in July to 130 in September and 127 in November and December.[16] If the Reichsbank was guided by the price levels of England and the United States, as it stated, these price levels were increasing from July to September, and both remained stable for the last three months of the year, but this was achieved *after* the increase in the Reichsbank rate. On the other hand, neither the French price level nor the Austrian showed a marked decrease. If international price-level movements were a contributing factor in the October increase in bank rate, it was not the price levels of England and America that influenced the Reichsbank as much as those in France, Austria and other surrounding countries. It is more probable that there was a definite desire to check the increase in the domestic price level no matter what was happening in other countries. The German price level had increased from 135 in April 1927 to 140 in September. After the October increase in bank rate, the price level remained stable at 140 for the rest of the year. It decreased to 139 in January 1928, and to 138 in February; thereafter it increased slowly to 142 in July and August; in September it dropped to 140, where it remained to the end of 1928.[17] The Reichsbank held its bank rate at 7% throughout 1928.

The year 1928 was a stable one for the German economy—a lull before the storm. The marked signs of the business pros-

16 *Vierteljahrshefte zur Konjunktur Forschung,* 1928, No. 4, Part B, p. 77. The price level of the United States is computed with 1926 as the base year; those of Great Britain and France with 1913 as the base; and the Austrian price level with the first half of the year 1914 as the base.

17 *Ibid.,* 1928, No. 2, p. 89.

perity of 1927 disappeared, and in the latter half of the year there was a slow and gradual slackening of business. On January 12, 1929 the Reichsbank decreased its bank rate to 6½%. According to the Annual Report, the Reichsbank "consciously overlooked the fact that this would retard foreign funds and might lead to a lowering of the gold and foreign exchange holdings." [18] The Reichsbank was again using its discount rate to control the domestic business situation independent of the possible effect of the rate change on the flow of foreign funds. Both the increase in bank rate of October 1927 and the decrease in January 1929 were made because of the cyclical swings in business; the former with the purpose of checking too rapid expansion, and the latter to check too rapid contraction.

From June 1927 to the beginning of May 1929, the Reichsbank relied more confidently upon its discount policy as its only tool of credit control. This is the only period in the entire ten years under discussion in which one can judge the effectiveness of bank rate as a control technique uninfluenced by other control policies. This was, also, the only period in the entire decade in which the demands made upon the central bank were the demands of a normal economy functioning more or less free from the emergency situations that had faced the Reichsbank in the earlier period and that were to face it with increasing severity in later ones. The use made by the Bank of its discount policy was guided by a desire to protect the gold and foreign exchange covering of the note circulation (June 1927), to check the supply of money in circulation and hence the rising price level (October 1927), and to check the slow decline in business that set in in the latter part of 1928 (January 1929). Unfortunately, the effects of the last decrease in bank rate were not permitted to work themselves out because of the political developments of the spring of 1929. It is possible, however, to gain some idea of the effectiveness of the first two objectives of Reichsbank policy. Table XXXVIII

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TABLE XXXVIII. THE SUPPLY OF MONEY AND PRICE LEVELS, JUNE 1927–DECEMBER 1928
(In millions of reichsmarks)

Month end	Total money in circulation (4+5+6+7)	Gold (1) [a]	Foreign exchange (2) [a]	Reichsbank notes (3) [a]	Total cash in circulation (4) [b]	Giro deposits of the Note banks (5) [b]	Giro deposits of the Savings banks (6) [c]	Postal check deposits (7) [c]	Price level (8) [b]
June 1927	8346.0	1802.6	67 0	3815.2	5800.0	779	1157.9	609 1	138
Sept. "	8563.0	1852.1	153.8	4182.4	6100.0	745	1150 5	567.5	140
Dec. "	8971.3	1864.6	282.0	4564.0	6300 0	911	1148.3	612 0	140
March 1928	8709.5	1930.7	188.9	4513.2	6200.0	655	1284.5	570 0	139
June "	9012.4	2083.8	250.0	4674.2	6400 0	679	1336.2	597.2	141
Sept. "	9178.0	2397.0	179.4	4830 2	6600 0	650	1341.2	586.8	140
Dec. "	9685.3	2729.3	155 3	4930.0	6700.0	964	1378.0	643 3	140

[a] *Untersuchung des Bankwesens*, Part II, *Statistiken*.
[b] *Vierteljahrshefte zur Konjunktur Forschung*, 1928.
[c] *Statistisches Jahrbuch fur das Deutsche Reich*, 1928, 1929.

presents the figures for gold, foreign exchange, quantity of money in circulation, and price levels from June 1927 to December 1928.

The objective of increasing the gold and foreign exchange holdings of the Reichsbank in order to strengthen the covering of the notes in circulation was not achieved by the June increase in discount rate. Although there was an absolute increase from the end of June to the end of September in gold and foreign exchange of 136.6 million reichsmarks, there was at the same time an increase in notes in circulation of 367.2 million reichsmarks. The note coverage had thus decreased from 49% at the end of June to 48% at the end of September, while the gold coverage alone was down to 44.3%.[19] This was the lowest coverage percentage that the Reichsbank had had since the stabilization of the currency. It is probable therefore that the decision to raise the Reichsbank rate in October 1927 was taken with the hope of encouraging foreign funds even more than its avowed purpose of checking the rising price level. By the end of December, the Reichsbank had not yet been successful in increasing its coverage percentage. Gold and foreign exchange increased by 142.7 million reichsmarks, but notes in circulation increased even more rapidly—by 381.6 million reichsmarks. The cover percentage was down to 47% for gold and foreign exchange, while for gold alone it was only 40.9%.[20] By the end of the following quarter there had been an absolute decrease in gold and foreign exchange of twenty-seven million reichsmarks, but notes in circulation decreased by 50.8 million. Definite improvement in the Reichsbank's holdings of gold and foreign exchange and notes in circulation was noticeable at the end of June 1928. There was an increase in gold and foreign exchange of 214.2 million reichsmarks and an increase in notes of only 161 million reichsmarks, which brought the cover percentage to 49.9%; gold coverage alone increased to 44.6%.[21] Maintenance of the

19 *Untersuchung des Bankwesens, op. cit.,* Part II, p. 453.

20 *Ibid.* 21 *Ibid.*

stability of the currency through central bank discount policy designed to protect the gold and foreign exchange holdings was achieved through the 1927 increases in bank rate. It took one year to accomplish this result and a two percent increase in bank rate.

It is difficult to determine whether or not the Reichsbank was sincere in its stated desire to check the increase in price level through its October increase in bank rate. However, if one takes its statement of its own purpose at face value (neglecting for the moment the fact mentioned above that the American and English price-level movements did not bear out the Reichsbank's interpretation of them), one finds that stability in the German price level was achieved by the end of December 1927 and an actual decrease for the first quarter of 1928. Although the total quantity of money in circulation [22] increased by 408.3 million reichsmarks at the end of December 1927, the price level remained stable at 140 after having increased steadily from March to September. At the end of March 1928, there was a decrease in total money in circulation of 261.8 million reichsmarks and a 1% decrease in the index number of wholesale prices. Up to this time, the Reichsbank had been successful in bringing about a decrease in the price level but unsuccessful in protecting the gold and foreign exchange coverage of the notes. By the end of June 1928, however, the situation was reversed. Money in circulation and price levels went up (302.9 million reichsmarks and 2% respectively) but the gold and foreign exchange position was improved; the price level objective was at this time unsuccessful, but the protection of the coverage percentage was successful.

22 "Money" is used to include cash and bank deposits subject to check. The balances of private and public banks subject to check are not included in these figures because the German banks publish only the total amount of their deposits (*fremden Gelder*) which includes the credit balance in current accounts as well as deposits not subject to check. The larger proportion of German bank deposits is not subject to check. The Reichsbank handles most of the clearing business for all of Germany.

The Reichsbank kept its bank rate at 7%. By the end of September the price level had again dropped to 140, while the gold and foreign exchange position was definitely improved—the gold and foreign exchange coverage had increased to 53.3%. By the end of the year the price level was still stable at 140 and the gold and foreign exchange coverage had reached 58.5%. It was at this point that the Reichsbank on January 12 decided to lower its bank rate to 6½%.

It is possible to attribute complete success to the Reichsbank's use of discount policy from June 1927 through December 1928 in the light of its objective of protecting the gold and foreign exchange covering of the notes in circulation. One cannot make the same broad claims for the achievement of the second objective—the maintenance of the stability of the domestic price level—through discount policy. Too many variable factors enter in. The most that can be said is that the objective was achieved and that Reichsbank policy was probably one of the contributing factors.

The Discount Policy—April 1929 to May 1931

The German economy was subject to political storms with far-reaching economic and financial consequences from the spring of 1929 through the spring of 1933, when the Hitler government finally came into power. A study of the effectiveness of the discount policy as a technique of credit control is therefore to a very large extent confined only to the immediate use made by the Reichsbank of its discount policy in the quiet periods between extreme emergencies.

The spring crisis of April-May 1929, having its origin in the political alignments of the Young Conference, has already been discussed.[23] The Reichsbank rate, which had been decreased to 6½% in January 1929, was increased on April 25, 1929 to 7½% to protect the drain on the Reichbank's gold and foreign exchange holdings. When this proved ineffective, the discount policy was abandoned completely in favor of credit

23 Chapter VI.

restriction, which lasted for six weeks, from the beginning of May to the middle of June 1929. Protection of the currency was at all times the first objective of the bank. The effects of the May crisis on the gold and foreign exchange position of the Reichsbank are shown in the following figures: at the end of March 1929, the Reichsbank had 2,682.7 million reichsmarks in gold and foreign exchange; at the end of June, 1,911.4 million reichsmarks; the cover percentage dropped from 56.4% to 47%, while the gold covering alone dropped from 55.6% to 39.5%.[24]

The effects of this political run on the Reichsbank had been overcome by the end of September. The position of the Reichsbank was strong enough to permit of a reduction in bank rate and the condition of the domestic economy would have been aided by cheaper credit facilities. The note coverage was again 51.8% and production and prices in Germany showed the signs of a full-fledged business depression. The Reichsbank discount policy was, however, conditioned by the relationship of the German bank rate to foreign bank rates. The Annual Report of the Reichsbank for 1929 contains the statement that "in the course of the second half-year, the position of the Reichsbank continued to improve, so that as regards its own position it had no longer any reason for entertaining scruples as to reducing the bank rate in order to meet the requirements of trade and industry. Considering, however, the exceedingly strained situation on the foreign money markets and the high figures of Germany's short-term engagements toward other countries, it was necessary to avoid reducing too abruptly the margin between the rates obtaining at home and those abroad."[25]

An examination of the movement of bank rates in Berlin, London and New York (Chart IV), shows a surprising similarity of movement from October 1929 to June 1930. The

24 *Untersuchung des Bankwesens,* Part II, p. 453.

25 Page 5.

Berlin bank rate, however, lagged behind the foreign rates. The degree and extent of this lag is shown in the following table:

TABLE XXXIX. CENTRAL BANK REDISCOUNT RATES
September 1929 to June 1930

Date of bank rate changes	Berlin	London	New York
September 26, 1929	–	6½	–
October 31, "	–	6	5
November 2, "	7	–	–
November 14, "	–	–	4½
November 21, "	–	5½	–
December 12, "	–	5	–
January 14, 1930	6½	–	–
February 6, "	6	4½	4
March 6, "	–	4	–
March 8, "	5½	–	–
March 13, "	–	–	3½
March 20, "	–	3½	–
March 25, "	5	–	–
May 1, "	–	3	3
May 20, "	4½	–	–
June 19, "	–	–	2½
June 21, "	4	–	–

Thus, although these bank rates moved downward steadily, the movement in the Reichsbank rate was always controlled by bank rate changes in London and New York. This is a clear illustration of the nervousness that developed in Berlin after the Young Conference had made all too apparent the extreme vulnerability of the German situation. Although the discount policy had been, up to this time, conditioned to some extent by the flow of foreign funds, the Reichsbank had, nevertheless, been able to achieve a certain independence as long as funds were flowing *toward* Germany, and it had been able to adapt itself to that flow. The rebuilding of the German economy with the help of foreign capital and the accumulation of domestic savings had brought Germany by 1927 into closer touch with the rest of the world and, as we have seen, had given to the discount policy of the Reichsbank a degree of flexibility that permitted it to serve (for a short period) as an effective control technique. Internal conditions were still abnormal in 1927 and 1928 in so far as there was a dangerous expansion of short-term bank credit for long-term capital finance, but even here progress was being made in rehabilitating the capital market. The abnormality connected with foreign funds in the German market was the possibility of their sudden withdrawal in response to political factors. This is a point that is frequently overlooked by those persons who criticize the Reichsbank's attitude toward foreign funds. It is not an economic reason; it is a political reason—one that economists are in the habit of casually lumping under "exogenous changes."

The September crisis had its origin in the foreign reactions to the German elections and led to a second run on the German currency. The Reichsbank controlled this situation not so much through its discount policy as through its gold and foreign exchange policy. On October 9, however, it increased its bank rate to 5% (from 4%) where it remained until the crisis of 1931.

The discount policy of the Reichsbank was given up in May 1929 as a control device and was made supplementary to its gold and foreign exchange policy in the September 1930 crisis. In between these two periods the only use made of bank rate changes was to permit the Reichsbank rate to follow London and New York rates downward. This it did very well. One can scarcely call the discount policy of the Reichsbank a tool of central bank control during this period. The single objective of the Reichsbank was to protect the stability of the reichsmark—stability at home as well as abroad. To this end it directed all of its tools, its discount policy, its gold and foreign exchange policy, and credit restriction. Until the summer of 1931, it was successful in maintaining the reichsmark at par in terms of the foreign exchanges and in warding off the danger of too sudden withdrawal of foreign short-term funds.

The Discount Policy, Summer of 1931 to 1933

Although, in general, the Reichsbank abandoned its discount policy as a means of control over the summer crisis of 1931, it made one abortive attempt to stem the tide of foreign withdrawals by a 2% increase in its discount rate on June 13. It is difficult to understand why the Bank waited as long as it did to change its bank rate. It is true that the gold and foreign exchange position of the Reichsbank was particularly strong, and that its holdings had increased steadily from January to the end of May at the same time that its bill credits were decreasing. Gold and foreign exchange together increased from 2,443.6 million reichsmarks at the end of January 1931 to 2,576.5 million reichsmarks at the end of May; the domestic bill credits decreased during the same period from 1,942 million reichsmarks to 1,791.4 million reichsmarks; the cover percentage for notes in circulation stood at 59.9 [26] at the end of May. It is true, also, that Germany was feeling the severity of the world depression and that a bank rate of 5% was considered desirable for the domestic economy. Nevertheless, the Reichsbank was aware of the fact that an increasing nervousness and tension was brewing in international money markets. The Annual Report for 1931 contains several references to this general uneasiness. "Ever since the autumn of 1930, because of domestic and foreign political disturbances the German money market found itself under the pressure of the withdrawals of foreign credits which were no longer balanced by new foreign loans." [27] "In spite of the decreasing volume of business, the Reichsbank found it impossible to lower its discount rate [in the spring of 1931] because of the excessive demand of the banks for support from the note bank and because of its unsafe foreign exchange position." [28] The "unsafe foreign exchange position" refers evidently to the fear

26 *Untersuchung des Bankwesens,* Part II, p. 454.

27 Page 4.

28 Page 6.

of the sudden withdrawal of foreign short-term funds, rather than to an actual shortage of gold and foreign exchange. The dependence of the banks on the Reichsbank did not mean that the total volume of Reichsbank credits had increased (there was actually a decrease in amount), but that the form of Reichsbank credit had changed. As was pointed out by the Bank Investigation Committee of 1926-1929, the form of credit granted by the Reichsbank is often a better index of the true condition of the banks and the domestic money market than the quantity of Reichsbank credit outstanding.[29] Since September 1930, the average length of life of the bills discounted by the Reichsbank had increased from between twenty and thirty days to between thirty and forty days.[30] The amount of foreign exchange taken from the Reichsbank instead of from the open market had also increased, which indicated a tendency toward the hoarding of foreign exchange on the part of individuals and banks and increased the dependence of the banks on the central note bank.

These facts should have been danger signs to the Reichsbank. When the collapse of the Austrian *Kredit Anstalt* "spread like a shock throughout the world," and as a result the Reichsbank lost 200 million reichsmarks of gold and foreign exchange in the first week of June 1931, it still took no steps to protect itself through an increase in bank rate. Withdrawals of foreign funds daily increased in amount, but the Bank waited until June 13 before taking any action and then it increased its rate suddenly by 2%. No one, of course, could have foreseen the full extent of the run on Germany; but its seriousness must have been apparent long before the 13th of June. Nor is it possible to argue that the Reichsbank was ready to abandon its tool of bank rate as a control device, because action was finally taken, evidently in the hope that a 2% increase in bank rate would check the amount of foreign withdrawals.

29 *Die Reichsbank, op. cit.*, p. 69.

30 See above, Chart I-c, p. 53.

This use of bank rate as a tool of credit control was both bad timing and bad psychology. It is always dangerous to attempt to point out what would have happened had the steps taken been quite different; in this case it is particularly dangerous since the collapse of world credit in the summer of 1931 was actually a collapse of confidence in the international credit mechanism which had all of the earmarks of a psychological panic. Nevertheless, the sudden increase of bank rate from 5% to 7% on June 13 was a dramatic announcement to the world that the Reichsbank was in a serious condition. Central banks have not accustomed their public to 2% bank increases. The Bank of England (always the model for the manipulation of bank rate) usually increases bank rate by ½% to 1%; it may make several of these changes within a comparatively short period of time, but the changes themselves are gradual. The Federal Reserve banks have followed suit. International observers of the Reichsbank rate as an indication of the German situation in the summer of 1931 were, therefore, told very plainly that the situation was very bad indeed. The result was an intensification of the panic. Slow, steady increases in the Reichsbank rate beginning early in June might or might not have averted the crisis. Such increases, however, would have meant that the Reichsbank kept its bank rate in relationship to the development of events so that no unprecedented increases in rate would have been necessary.

The Reichsbank was probably acting in the belief that any increase in bank rate, given the existing nervousness in the money markets of the world, would have precipitated the crisis. This amounted, however, to a virtual abandonment of bank rate as a tool of credit control.

Bank rate as a control technique was completely abandoned by the Reichsbank in favor of credit restriction in the last week of June. The increase in rate on July 16 to 10% was in fact a part of the credit restriction policy. When credit restriction was given up in favor of control through discount policy on the first of August, the bank rate was increased to 15%.

It is not possible to discuss the discount policy of the Reichsbank from August 1931 to the end of 1933 in terms of the old classical theory of bank rate. The Reichsbank, as the central bank of the new economy that was emerging from the ruins of the old, became one of the pillars of the new state. Its power was tremendously increased. Together with the government it became the owner, directly or indirectly, of the large Joint Stock banks; it assumed virtual dictatorship over the savings banks and the coöperatives; it brought the money market and the capital market under its control; foreign exchange was completely centralized in the Bank; and, through its interest in foreign exchange, control over the export and import industries was brought gradually into its hands.

The objectives of the Reichsbank remained, curiously enough, the same objectives that had been formulated earlier in the decade—the maintenance of the stability of the reichsmark, the provision of cheap credit for "legitimate" trade, industry and agriculture, and the rebuilding of the banking system on lines of greater liquidity and soundness. Its discount policy, freed from the foreign entanglements of the previous years, was bent to serve these domestic ends.

Briefly, the discount policy of the Reichsbank was a "cheap money" policy from August 1931 to the end of 1933. From the unheard-of height of 15% on the first of August 1931, the bank rate was rapidly reduced to 10% on August 12, to 8% on September 2, and to 7% on December 10. During 1932 further decreases were made, to 6% on March 9, to 5½% on April 9, to 5% on April 28, and to 4% on September 22. This last decrease was made with the consent of the Bank for International Settlements and required a governmental decree setting aside the provisions of the Bank Act of 1924, which required the Reichsbank to maintain its discount rate at 5% if its gold and foreign exchange covering for notes in circulation fell below the legal minimum of 40%. The cover percentage was only 24.7% in September 1932.[31] The

31 *Untersuchung des Bankwesens,* Part II, p. 454.

bank rate remained at 4% throughout the year 1933. From September 1931 to the end of 1933 the Reichsbank rate established and maintained its old pre-war relationship to money market rates of interest; the Reichsbank rate became the leading rate and was used to depress the open market rates. This cheapening of credit was a part of wider state policy. The high interest burden borne by the German economy on both the domestic and the foreign debt was thought to be one of the stumbling blocks to recovery. The Reich, therefore, ordered the lowering of all interest rates on long-term securities held within Germany. Lower money market rates of interest were essential to the reëstablishment of the capital market, as well as desirable for the stimulation of industry.

There is no evidence that the discount rate was manipulated at this time either to increase or to decrease the price level. The German index number of wholesale prices declined steadily throughout 1931 and 1932—from 112 in July 1931 to 100 in January 1932, and to ninety-one in January 1933. After remaining stable at ninety-one for the first four months in 1933, it increased slowly to ninety-four in July.[32] The Reichsbank policy was directed toward the price level only in so far as decreases in bank rate during a period of depression are supposed to stimulate business activity and hence lead to increased prices. Control over prices was not left to the free operation of bank rate and its indirect effects, but was handled by direct price-fixing in certain industries in order to stimulate exports.

The period between September 1931 and December 1933 was a period of transition from a free economic order to a controlled economic and political state. An evaluation of the

32 *Vierteljahrshefte zur Konjunktur Forschung,* 1931, 1932, 1933. After July 1933, the institute shifted its index number from 1913 as the base year to 1928 as the base. The figures for the latter half of the year are, therefore, not comparable to the earlier ones. On the basis of the new index number, wholesale prices continued to increase in Germany during the latter half of 1933.

discount policy of the Reichsbank in this period belongs properly to the new order rather than to the old.

That the Reichsbank itself considered its discount policy an inefficient tool of central bank control is proved by its readiness to abandon bank rate in periods of emergency. In part, this attitude was conditioned by the abnormalities, both national and international, surrounding the German economy in the post-stabilization decade, and in part by the inability of the German bank rate to lean upon open market operations. But it was also conditioned by the Reichsbank's interpretation of its own role. The Reichsbank saw its task to be one of qualitative as well as quantitative guidance of funds. Bank rate is typically a method of control that affects all users equally; its function is simply to increase or to decrease the cost of credit, so that in periods of contraction the marginal users begin to drop out of the market, and in periods of expansion these marginal users may be tempted back. This was not enough for the Reichsbank, operating as the central bank of post-stabilization Germany. Credit should be made available to "desirable" industries and to "liquid" banks. This belief in qualitative control was one of the reasons why the Reichsbank did not rely more earnestly upon its discount policy.

An examination of the Reichsbank's use of this technique leads to the conclusion that, *all things considered,* the Reichsbank very skillfully bent bank rate to serve its own ends. With the exception of the clumsy use of bank rate in June 1931, the Reichsbank handled its discount policy in a manner designed to achieve the greatest possible degree of success. *All things considered* is, of course, an expression that covers all of the limitations surrounding the discount policy of the Reichsbank—the limitations inherent in the post-war world and in the German situation—as well as the limitations placed upon the discount policy because of the Reichsbank's own attitude toward its task of controlling the German economy.

CHAPTER IX

THE GOLD AND FOREIGN EXCHANGE POLICY

THE gold and foreign exchange policy of the Reichsbank was, on the one hand, directed toward the technical task of maintaining the stability of the currency in terms of foreign monetary units and of maintaining the legal coverage for the reichsmark, and, on the other hand, was intimately bound up with the discount policy and the regulation of the circulation of money in the whole area of the Reich.

Stability of the reichsmark in terms of the foreign exchanges was, after 1924, the basic objective of the Reichsbank. Probably an understanding of the passionate desire of the German people for a money unit of stable value is possible only to those persons who have lived through the terrors of an inflation. The German public is inflation-wise. During the inflation, it learned the significance of index numbers of prices. As the index numbers continued to rise, slowly at first and then more and more rapidly, it found itself able to purchase decreasing amounts of commodities and finally almost nothing with the old familiar marks. Any increase in index numbers of price levels caused immediate hoarding in Germany; and hoarding, not of paper marks, but of hard money (*Scheidemünzen*) and of foreign exchange. For, as the inflation continued, the German public learned quickly the significance of the foreign exchanges. It learned, first, to watch the fluctuating quotations of the dollar, the pound, and the franc; and later, to interpret as national and personal disasters the continued increases in the quotations of the mark. The dollar, particularly, since it was at the time the most stable of international currencies, was looked upon as the symbol of all that was desirable in a monetary unit. An appreciation of this psychological reaction of the German people to stable foreign exchanges is necessary to an understanding of the post-stabilization currency policy of the

Reichsbank. The international distrust of the German monetary unit, which was responsible for the safeguards written into the Bank Act of 1924, was not any greater than the national distrust. Currency stability became the cornerstone of Reichsbank policy.

The money and banking legislation of August 1924 was the last stage in the stabilization process in Germany. The monetary standard then adopted was the reichsmark—a theoretical gold monetary unit (not coined) bearing a fixed relationship to gold of 2,784 reichsmarks per kilogram of fine gold. It will be remembered that currency in circulation in Germany consisted of 1) token money, 2) Rentenbank notes, 3) notes of the four private note banks, and 4) Reichsbank notes. Money in the form of bank deposits subject to check consisted of 1) Giro deposits of a) the Reichsbank, b) the savings banks, c) the private note banks, and d) the postoffices; and also of 2) the demand deposits of the private and public commercial banks. The German banking system does not require any gold reserve for bank deposits subject to check. Of the four types of cash in circulation, only the Reichsbank note (by far the largest single element in the currency) was required to have a gold and foreign exchange coverage (40%). The maintenance of the gold reserve was entrusted to the Reichsbank. The Bank was required to purchase all gold presented to it, but it was not required to pay out gold on demand until the change in the Bank Act of April 19, 1930.

The task placed upon the new Reichsbank in 1924 was not an easy one. It was to retire the rentenmark from circulation as rapidly as it could acquire sufficient gold, foreign exchange, and bills to cover its own bank notes, which were to take the place of Rentenbank notes; and it was to maintain the gold parity of the new reichsmark. At the end of August 1924, the Reichsbank had practically no gold and foreign exchange, but the Dawes Loan in October of that year (800 million reichsmarks) provided the Bank with sufficient reserves to start operating on the new gold basis.

From the outset, the Reichsbank took the position that the central bank was obliged to pay out gold as well as to buy gold if it wanted to maintain the stability of the reichsmark in terms of the foreign exchanges. It also believed that the legal requirement of 40% gold and foreign exchange cover for its own notes was not sufficient to guarantee gold redemption of all the money in circulation; it believed that it was particularly important to maintain a gold reserve sufficient to cover the Rentenbank notes as well as its own Giro deposits.[1] The attainment of these objectives in the face of its own shortage of gold and foreign exchange required the Reichsbank to center its attention on the actual building up of its gold holdings, and on the protection of its gold and foreign exchange coverage. The problems connected with acquiring and protecting gold and foreign exchange were problems that occupied the Reichsbank from 1924 to 1933. Active management and control on the part of the Bank was essential at all times because of the narrow margin upon which the Reichsbank operated and because of the vulnerability of the Bank which arose out of the presence or absence of foreign funds in the Berlin market. It was no idle statement of Dr. Schacht's when he said, "Come over to Germany and show us how to run a bank without money."

The Gold and Foreign Exchange Policy, 1924 to 1926

From October 1924, when the new gold reichsmark was introduced, to August 23, 1926, the Reichsbank kept the reichsmark pegged to the dollar at the rate of 4.2 reichsmarks to one dollar.[2] During the year 1924, many of the foreign exchange restrictions that had been put into effect during the stabilization of the currency remained in force. These restrictions centered the foreign exchange business in the

1 See above, Chapter II, p. 46.

2 The Reichsbank had kept the rentenmark stable by pegging it to the dollar at the same rate. The transference from rentenmark to reichsmark meant no shift in the value of the German monetary unit.

Reichsbank, placed limits upon the amounts of foreign exchange that could be allotted, and also restricted the uses to which it could be put. The Gold Discount Bank (operating in terms of the pound sterling) relieved the Reichsbank of a large amount of the foreign exchange business that it would otherwise have had to assume. After gold stabilization and the Dawes Loan, private foreign capital began to come into Germany, comparatively slowly in 1924, but more and more rapidly thereafter. Although a large part of the foreign exchange still continued to come directly to the Reichsbank, the Bank took steps to reopen the spot foreign exchange business of the money market banks. The Reichsbank undertook to buy and sell dollar exchange at the fixed rate and, at the same time, prevented the establishment of forward exchange contracts in foreign exchange other than dollars on the part of the money market banks.[3] This had the effect of making dollar exchange more attractive to exporters and importers and to the banks that were beginning to receive foreign deposits. From the standpoint of the Reichsbank, it had the effect of increasing its supply of dollar exchange and simplifying its task of pegging to the dollar. The policy of credit restriction was in force during 1924 and 1925, and, as a part of credit restriction and foreign exchange control, the Reichsbank laid down the rule that all businesses that borrowed in foreign markets should be able to furnish foreign exchange to repay their foreign borrowings. As was brought out in Chapter VII, this qualitative guidance of foreign funds into the export industries was an integral part of Reichsbank policy during the years 1924 to 1931. It was, however, effective only as long as the Reichsbank kept foreign exchange centralized in its own hands and, as a part of its credit restriction policy, placed restrictions on the users of foreign exchange. Nevertheless, within the limits of credit restriction the Reichsbank met all demands for foreign exchange after June 4, 1924, kept the

3 *Annual Report of the Reichsbank*, 1924.

value of the reichsmark stable at its dollar parity, and bought all of the foreign exchange presented to it.

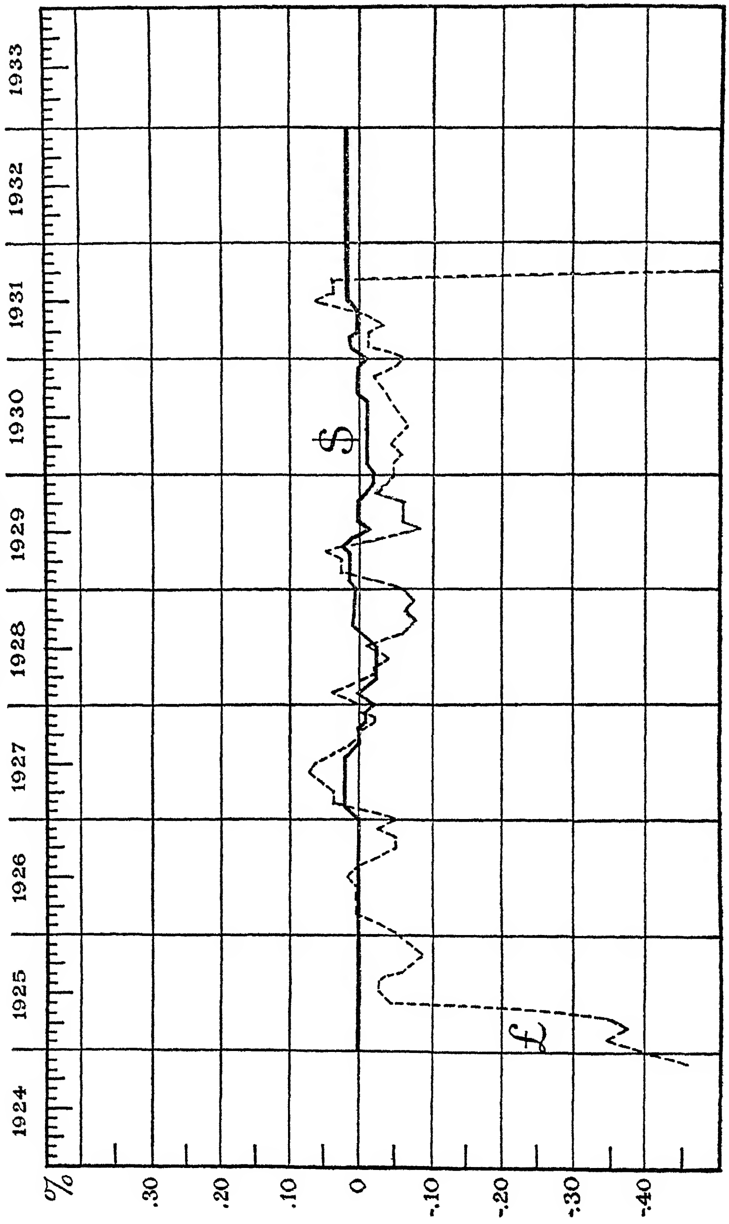
The influx of foreign funds during the years 1925 and 1926 enabled the Reichsbank to increase its gold holdings. The majority of funds came into Germany in these years in the form of foreign exchange. In order to maintain the legal gold requirement the Reichsbank was compelled to sell a portion of its foreign exchange in foreign markets for gold. This gold-buying policy of the Reichsbank was carried through without a disturbance of the foreign exchange rates and was made possible by the active cooperation of other central banks. At the same time, the Bank was gradually relinquishing more and more of its foreign exchange business to the open money market and easing its policy of credit restriction. Credit restriction was abandoned altogether at the beginning of 1926.

For the first time, in 1926, the Reichsbank felt its own helplessness in the face of the continued influx of foreign funds. During this year, more foreign exchange was presented to the Reichsbank than bills for rediscount. As was pointed out in Chapter IV, a large proportion of foreign currency deposits was transferred to German banks through cable transfers and drafts; a smaller proportion was transferred through foreign bills of exchange. The Bank was compelled, therefore, to sell some of its foreign exchange in foreign markets, not only for gold, as it had done before, but also for the purchase of foreign bills "in order to have the necessary bill and check cover available in foreign bills if domestic bills were not to be had." [4] Nevertheless, the Reichsbank was able to maintain the stability of the reichsmark through buying and selling

4 *Ibid.*, 1926. This purchase of foreign bills rather than gold was actually an expression of preference on the part of the Reichsbank. Its cover had to be made up of gold, foreign exchange and a certain type of bills of exchange. The minimum gold and foreign exchange cover was set at 40%, but the maximum was, of course, unlimited. Foreign bills gave the Reichsbank an opportunity to control the foreign exchange market and also permitted the Bank to earn a profit on its assets; they were therefore more desirable than gold.

CHART VI. POUND AND DOLLAR QUOTATIONS IN BERLIN, 1924-33

(DEVIATIONS FROM PARITY)



dollar exchange on the open market. The Reichsbank, as the largest single holder of foreign exchange, was able to use its surplus as a control device. Its open market foreign exchange operations generally consisted in selling dollar exchange at 4.20 in the open market in order to acquire sufficient funds for its ultimo finance and, after the month-end settlement day was safely past, to rebuy dollar exchange.[5] This operation succeeded in eliminating foreign exchange rate fluctuations which might have resulted from variations in the stream of foreign funds, and it also served to check, to some extent, the increased circulation of bank notes. The open market purchase and sale of foreign exchange was used regularly by the Bank, but its effect on the flow of foreign funds was, of course, limited by the Bank's holdings of foreign exchange. Until August 23, 1926, its open market buying and selling was pegged to the dollar. While theoretically it abandoned the dollar in 1926 and thereafter permitted foreign exchange rates to fluctuate with supply and demand, the dollar always remained the guide to Reichsbank policy. An examination of the dollar and pound quotations in the Berlin market (Chart VI) [6] brings out the close dependence of the reichsmark on the dollar. The Reichsbank refused to permit the reichsmark to deviate very widely from dollar parity and maintained reichsmark stability in terms of the dollar by active foreign exchange operations in the open market.

The Gold and Foreign Exchange Policy, 1927 to 1928

In an effort to discourage foreign borrowing, the Reichsbank lowered its discount rate in January 1927. The immediate effect of this decrease was a falling off of foreign funds for the first six weeks of the year. Thereafter, although foreign short-term capital came into Germany for use on the stock market, the gold and foreign exchange holdings of the Reichs-

5 *Die Reichsbank, op. cit.*, p. 77.

6 Plotted from statistics in *Statistisches Jahrbuch für das Deutsche Reich*, 1924-1933.

bank were under a constant drain because of the large adverse trade balance, the necessity of service and amortization charges on foreign loans, and because of reparations. The action taken by the Reichsbank in May 1927, in "advising" the banks to become more liquid, resulted in their repaying large amounts of foreign short-term loans. Altogether, the gold and foreign exchange reserves of the Reichsbank were submitted to heavy pressure. The gold export point for both the dollar and the pound was reached early in 1927, and the foreign exchanges remained unfavorable to Germany until late in June. During this period, the foreign exchange open market policy of the Reichsbank failed to turn the exchanges in its favor, although the Bank sold one billion reichsmarks of gold and foreign exchange on the open market.[7]

In the latter half of 1927, because of the return of foreign funds, the exchange rates on the dollar and the pound dropped to the gold import point. The Annual Report of this year contains the non-committal statement that, as the "possibility" of foreign loans coming into Germany in the form of actual gold began to loom on the horizon, the Reichsbank decided to take gold only at the legal price of 2,784 reichsmarks per kilogram of fine gold."[8] In this instance, the increase in the Reichsbank's buying price for gold was a control policy that was supplementary to its discount policy. It will be remembered that the Reichsbank made two increases in its discount rate in the latter half of 1927; the first in June and the second in October. There is every indication that the June increase in bank rate was made for the purpose of tempting foreign funds into Germany in order to replenish the gold and foreign exchange holdings of the Reichsbank; it was also considered desirable to influence the exchanges and to bring the dollar rate back to par. The Reichsbank had maintained the legal coverage not only for Reichsbank notes in circulation but

7 *Annual Report of the Reichsbank*, 1927, p. 7.

8 Page 7.

also for Rentenbank notes ever since the end of October 1924. However, on May 31, 1927, the coverage for Reichsbank notes plus Rentenbank notes was down to 39.85%—the lowest point that it had yet reached.[9] The Reichsbank not only did not want to discourage gold imports during the summer of 1927, but it actually purchased gold in foreign markets. The total increase in the Reichsbank's gold holdings during the latter half of 1927 was 177 million reichsmarks—forty-five million of which represented purchases by the Bank in foreign markets.[10]

It is probable, therefore, that the decision to raise the buying price of gold was connected with the second increase in bank rate, made in October 1927. The October increase in bank rate was made for the purpose of checking the rising price level in Germany. The Reichsbank determined to raise its rate in spite of the possible effect upon the flow of foreign funds and relied upon its open market dealing in foreign exchange to keep its own note issue under control. As was pointed out in Chapter VIII, the cover percentage of the Bank was low at the end of September 1927. The Reichsbank, therefore, probably did not fear the influx of foreign exchange on the price level, since it counted upon its own ability to absorb the increase without increasing bank notes in circulation. If, however, foreign loans began to come into Germany in the form of actual gold, open market purchases and sales of foreign exchange would have had little relative effect and the Bank's circulation of notes was bound to be increased.

It is impossible to isolate the effect of the Reichsbank's gold buying policy from other factors that were playing upon the total German situation. The pound remained at the gold import point throughout the latter half of 1928 and the gold holdings of the Bank increased steadily. However, the cover percentage for Reichsbank notes in circulation also increased from 48% at the end of September 1927 (44.3% for gold alone) to 58.5% at the end of December 1928 (55.4%

9 *Die Reichsbank, op. cit.*, p. 79.

10 *Annual Report of the Reichsbank*, 1927, p. 7.

for gold alone).[11] The Reichsbank seems, therefore, to have been successful in impounding gold to some extent and in bringing about a relative decrease in notes in circulation. The discount policy and the gold and foreign exchange policy together kept the price level and the influx of foreign funds under control.[12]

The Gold and Foreign Exchange Policy, 1929 to 1931

Three crises of increasing severity taxed the gold and foreign exchange holdings of the Reichsbank to the utmost during the years 1929 to 1931. The policy of the Bank in each instance was to pay out gold and foreign exchange in sufficient quantities to stem the tide of withdrawals and to reëstablish confidence, while at the same time it took other steps to protect its own position. In two instances, March to June 1929 and September to October 1930, this policy of gold and foreign exchange payment was successful; in the 1931 crisis, the whole system broke down. The 1929 crisis was met by the Bank with an increase in discount rate and credit restriction; the 1930 crisis was met by an increase in discount rate and borrowing from foreign central banks; the 1931 crisis was met by all three—bank rate increase, credit restriction, and foreign borrowing—but these measures were at this time incapable of checking the panic. All three of these attacks on the German currency had their origin in foreign distrust, but they were all intensified by the flight of domestic capital as the international and domestic political situation seemed to become more impossible of solution.

During the 1929 run on the German currency, the Reichsbank lost one and one-half billion reichsmarks of gold and foreign exchange. In order to meet these withdrawals, the Bank sold gold in foreign markets—870 million reichsmarks in New York, forty million in London, seventeen million in Paris, and twenty-eight million in Holland and Switzerland.

11 *Untersuchung des Bankwesens, op. cit.,* Part II, p. 453.

12 See Table XXXVIII, p. 294.

These sales were made possible without actual gold shipments by borrowing gold from foreign central banks. This cooperation of foreign central banks was invaluable to the Reichsbank, not only from the standpoint of minimizing gold shipments but also from the wider standpoint of the revival of international and domestic confidence. Although it is true that the origins of the run were political, and probably instigated at Paris, the presence in Paris of government representatives of the important nations had the effect of developing international cooperation to support the Reichsbank. A collapse of the German currency at that time would have been disastrous to the political hopes of the Young Conference.

With credit restriction in force in Germany during May and the first two weeks of June 1929, foreign exchange began to come back to the Reichsbank as debtors were forced to find funds for immediate financing. The Reichsbank purchased foreign exchange at first only in limited quantities. The Annual Report for 1929 states that this was "a line of action which assisted in strengthening the exchange rate of the reichsmark." [13] The restrictions placed upon the purchase of foreign exchange had the effect of denying central bank support to further foreign exchange withdrawals. Holders of foreign exchange were forced to sell in the open market, which kept the money market liquid and supported the reichsmark.

It is interesting to note the differences in the dollar and pound quotations in Berlin during this period. The dollar was, for a time, at the gold export point (See Chart VI). During May, however, money market dealings in dollar exchange in Berlin, and Reichsbank open market operations forced the dollar downward until, by the beginning of June, the dollar was slightly below par. The pound, on the other hand, was at the gold import point at this time and remained low throughout 1929 and 1930. Although the Reichsbank was anxious to rebuild its gold and foreign exchange holdings after the 1929

13 Page 6.

crisis, it did not desire to take gold from London, and placed obstacles in the way of gold imports. The Reichsbank Annual Report for 1929 contains the following statement: "If the Reichsbank endeavored, occasionally, to put obstacles in the way of gold imports from England, which had become possible from about the end of May onwards, it did so more particularly because it desired to avoid influencing the Bank of England in regard to its bank rate policy, inasmuch as any change therein was bound to react unfavorably upon the German money market." [14] Just how far the Reichsbank went in placing obstacles in the way of English gold imports, it does not reveal. An increase in the Bank of England rate would have seriously interfered with the Reichsbank's desire to decrease its own bank rate. As was pointed out in Chapter VIII, the Reichsbank was forced to keep its own rate well above foreign bank rates in order to prevent the withdrawal of foreign funds from the Berlin market. The span between the Berlin and London rates was only 1% in the latter half of 1929; an increase in the English rate would either have forced an increase in Reichsbank rate, or it would have subjected the Reichsbank to a renewed drain of gold and foreign exchange as foreign balances began to be shifted to London. The Reichsbank's gold and foreign exchange position as well as the German economy would have suffered from such withdrawals.

The 1930 crisis lasted only from the 21st of September to the 14th of October. A government short-term foreign loan of $125,000,000 brought gold and foreign exchange to the Reichsbank which enabled the Bank to meet all withdrawals easily. At the same time the Bank gained complete control of the foreign exchange market through its heavy purchases and in turn limited its own sales of foreign exchange to bona fide demands. During this crisis, the Reichsbank sold 386 million reichsmarks of gold in Paris and fifty-two million in Amsterdam. A further shipment of gold to Paris of seventy-two million reichsmarks was made, but was kept on deposit at the Bank

14 Page 6.

of France because its sale was not essential. The gold and foreign exchange holdings of the Reichsbank decreased by 499.9 million reichsmarks from the end of August to the end of October 1930.[15] This September 1930 run on the German currency probably marked the flight of domestic capital as much or even more than the withdrawal of foreign funds, although it is impossible to determine the relative extent of the domestic withdrawals. The internal political situation was becoming more and more precarious in Germany. The full significance of the struggle between the two radical political parties, the Communists on the one hand, and the National Socialists on the other, was appreciated at the time in Germany even more than in other countries. The government's success in floating an international loan probably allayed foreign fears to some extent, while domestic fears were quieted by the immediate strength and determination shown by the coalition government. This was the beginning of the emergency decrees which became more and more frequent as time went on, and which marked the gradual transference of Germany from a free to a controlled economy.

THE GOLD AND FOREIGN EXCHANGE POLICY, 1931 TO 1933

For the first six weeks of the summer crisis of 1931, the Reichsbank paid out gold and foreign exchange on demand. It was not until its own holdings were practically exhausted and its foreign credit worn out that rigid foreign exchange restrictions were put in force. In spite of the readiness of the Bank to pay out gold and foreign exchange, the run on the banking system continued to gain momentum until active control measures on the part of the government and the Reichsbank were required to bring the country back to some semblance of economic order. The story of the crisis and its effect upon the gold and foreign exchange holdings of the Reichsbank and upon its repayments of foreign indebtedness has already been told. The effect of foreign exchange control on the policies of the Reichsbank and on the general economic develop-

15 *Untersuchung des Bankwesens, op. cit.,* Part II, p. 453.

ment was to bring all phases of the economic life gradually under the control of the central bank.

On July 15, 1931 an emergency decree in regard to foreign exchange was passed that centered all foreign exchange transactions in the Reichsbank or in agents designated by the Reichsbank.[16] Dealings in foreign currencies or in claims to foreign currencies were to be carried on at the rate last published on the Berlin bourse and forward contracts in foreign exchange were forbidden. At the same time the Reich Minister of Economics was given the right to require every person to register with the Reichsbank the amount of foreign currency or claims to foreign currency he possessed or the amount of business transacted in foreign currency either for his own account or for that of others.

This decree was followed on July 18, 1931 with a measure designed to prohibit the flight of domestic capital.[17] Immediate registration and sale (if demanded by the Reichsbank) of all foreign exchange holdings at the Reichsbank and the registration of all claims that had to be settled in foreign currencies and the terms and dates of such obligations were required under heavy penalties. On July 21, 1931 foreign currency and claims to foreign currency of 20,000 reichsmarks and over were to be sold to the Reichsbank and by July 27, 1931 debts owed to foreigners of 50,000 reichsmarks and over had to be registered.

The foreign exchange law that formed the basis of control in Germany was passed on August 1, 1931 and became effective on August 4.[18] It will be remembered that from July 14, 1931 to this time there was a complete moratorium on all foreign payments. The Seven Power conference meeting in London had recommended to the Bank for International Settlements on July 20 that foreign short-term credits in Germany should be prolonged for at least six months. The law of August 1, 1931, therefore, made no provision for the pay-

16 *Reichsgesetzblatt*, 1931.

17 *Ibid.*

18 *Ibid.*

ment of foreign short-term credits and gave to the Reichsbank the supervision of any repayments that might be covered by agreements between German debtors and foreign creditors. This latter provision took cognizance of the fact that the first Basle commission was even then studying the short-term credit position of Germany and that some recommendation for a bankers' agreement was to be made. The first standstill agreement known as the German Credit Agreement of 1931 was, as a matter of fact, signed by all the bankers concerned in the latter part of September and became effective, retroactively, from September 1, 1931. It should be borne in mind that the first credit agreement governed the repayments of banking credits and the foreign exchange law of August 1, 1931 (with frequent amendments) governed all other payments to German foreign creditors.[19]

The main provisions of the Foreign Exchange law of August 1, 1931 were briefly as follows:

1) Offices for foreign exchange control were set up (usually identified with the local tax offices) under the supervision of the Reichsbank; they were to have control over all foreign exchange transactions and reichsmark balances held for the account of foreigners. The Reichsbank, however, was given direct control of all transactions arising out of the credit agreement of 1931.

2) All foreign exchange was to be sold to the Reichsbank except that free transactions in foreign currency or claims to foreign currency were permitted up to 3,000 reichsmarks in each case (reduced to 1,000 reichsmarks on August 29, and to 200 reichsmarks October 2). A case was defined as the total of one person's transactions for one month.

3) All requests for foreign exchange had to be in writing and the request would be granted if the foreign exchange were intended for interest or amortization payments on long-term loans. It is extremely difficult to determine from this section of

19 See above Chapter VI, pp. 220 to 222 for a discussion of the credits included in and excluded from the German Credit Agreement of 1931.

the law whether in the beginning it was intended to service all long-term loans in Germany. As the year progressed the foreign exchange office required most payments of this nature to be made in reichsmarks to the account of the owner and the accounts so built up were known as *blocked credit marks.*

4) Written permission of the foreign exchange office was required to grant credits in reichsmarks to foreigners, to transfer such credits, or to make any disposal of them.

5) Forward contracts in foreign currencies were forbidden and all purchases and sales had to be at the last quoted official rate.

6) Foreign securities not dealt in on a German stock exchange could be bought and sold only with the written permission of the foreign exchange office.

This law was amended frequently and was finally rewritten on May 23, 1932. The regulations issued under the law were gradually more restrictive as the crisis developed into prolonged depression and as the gold and foreign exchange position of the Reichsbank failed to improve. Foreign exchange restrictions designed to protect the domestic currency and the central bank developed into foreign exchange control that had two dominating purposes—1) to prevent the withdrawal of foreign short and long-term capital and 2) to provide for the employment of such funds in Germany so as to serve the "best interests of the entire economy." For instance, on October 2, 1931 it was provided that a permit would be granted to a foreigner to dispose of an account that had belonged to him prior to July 16, 1931 if the amount was used to buy new German securities which were to be left on deposit with a German bank. The bank was to have the right to collect interest or dividend payments in reichsmarks to the account of the foreigner and to credit the proceeds from the re-sale of any such securities to his old account. By November 17, 1931 all exporters were required to register the terms of their sale with the Reichsbank and to acquire a declaration of export value. By December 29, 1931 the published regulations of the foreign exchange offices showed that the following rules had been developed: [20]

1) Permits were refused for the repayment of short-term credits in Germany prior to July 16, 1931 unless on August 1, 1931 a prolongation of six months was granted.

2) Permit to dispose of an account in Germany prior to July 16, 1931 (blocked marks) was to be granted a) only for pressing personal need, or b) to pay German debts arising from trade if it could be proved that no other method of payment was possible, or c) to purchase long-term investments in Germany. In the latter case interest and dividend payments were to be made in reichsmarks into a blocked credit account.

3) Use of blocked credit accounts in Germany could also be made for the purchase of long-term securities subject to the same restrictions as in rule 2) above.

The foreign exchange law of May 23, 1932 and the regulations issued under it on June 23 were similar to the earlier law and regulations. There were definite provisions made for the repayment of all German obligations in blocked credit marks and the use of all types of balances in Germany was clarified. Permission was granted to use old mark balances in personal travel in Germany and all investments in long-term securities had to be for those running five years or more. German real estate was open to foreign purchase but any profits out of purchases and sales had to be reinvested within two months. All investments of 100,000 reichsmarks and over could be made only with the special permission of the Reich Minister of Economics.

Three types of mark balances were to be distinguished: the *blocked mark* and the *blocked credit mark* which were subject to the control of the foreign exchange offices, and the *registered mark* growing out of the credit agreements of 1931 and

20 *Foreign Exchange Restrictions: Germany*—Issued by the Bank of International Settlements.

1932 and subject to the control of the Reichsbank.[21] On October 17, 1932 a fourth type of blocked account was set up—the *blocked security mark.* This included the accounts built up in the names of foreigners arising out of the profits accruing from the purchase and sale of German securities. Retroactive to April 1932, these balances could be used only for buying negotiable securities of German corporations.

Until September 1934, no basic changes were made in the foreign exchange law. The regulations became more strict and the allotments of foreign exchange, even under permit, were constantly reduced. The basis of the allotment to an individual importer was a certain percentage of his average demand throughout the base period—January to June 1930. The percentage at first was 75% but was sharply reduced until, by September 1934, the amount of foreign exchange available for each importer was only 5% of that used by him during January-June 1930. Although it was generally claimed in Germany that there was an impartial allotment of foreign exchange—impartial as to country and importer—there was gradually developing a control of the export and import industries which finally became complete in 1934. It was in September 1934 that Germany began frankly to use her blocked mark accounts as an advantageous bargaining weapon in gaining credit and clearing agreements with foreign countries. This development, however, was already under way in 1932 and in 1933.

Foreign exchange control was first made to serve the German export industries, and finally was used to limit and to select imports. In 1932, Germany made bilateral trade agreements with nine countries.[22] Under the terms of these agreements credits piling up to the account of these countries

21 For a complete discussion of the development and use of these blocked marks up to April 1924, see Ernest Wolff, "The Blocked Mark Account" (unpublished thesis, New York University).

22 Denmark, Finland, France, Holland, Italy, Norway, Sweden, Spain and Switzerland. *Annual Report of the Reichsbank*, 1932.

under the standstill agreements were to be used in direct payment for German exports. A special agreement was negotiated by the Reichsbank with the Hungarian central bank under which the two Banks cleared all foreign exchange commitments and transferred only the balance due. Other bilateral agreements [23] required all trade to be carried on in a third currency and also provided clearing arrangements for foreign exchange through the central banks.

In spite of the foreign exchange restrictions, the standstill agreements and these bilateral trade agreements, which were designed to limit the demands on the Reichsbank for foreign exchange as well as to stimulate exports, the Bank continued to lose gold and foreign exchange. From September to December 1931, the Reichsbank paid out about one billion reichsmarks in gold and foreign exchange and during the year 1932, it lost another 550 million reichsmarks.[24] During these years, the gold and foreign exchange position of the Reichsbank was strengthened by the prolongation of the foreign central bank loan of $100,000,000 and the New York Gold Discount Bank loan of $50,000,000. Both of these loans carried 10% interest. On March 4, 1932, $10,000,000 was paid back by the Reichsbank on the central bank loan; on March 5, 1933, an additional $20,000,000 was repaid on this loan and $5,000,000 on the New York loan. After the resignation of Dr. Luther and the reinstatement of Dr. Schacht as president of the Reichsbank, the Reichsbank repaid, as a matter of policy, the entire amount of both loans—$70,000,000 to the one and $45,000,000 to the other.The carrying of these loans on the balance sheet of the Reichsbank as a part of its holdings of gold and foreign exchange had long been attacked by Dr. Schacht (then out of office) on the ground that the true gold and foreign exchange position of the central bank was being concealed. The gold and foreign exchange holdings of the Reichsbank, which were 510 million reichsmarks at the end of April 1933, were re-

23 With Bulgaria, Greece, Esthonia, Jugoslavia, Latvia and Rumania, *Ibid.*

24 *Annual Report of the Reichsbank*, 1931, 1932.

duced to 273.2 million reichsmarks by the end of June;[25] the gold and foreign exchange coverage for Reichsbank notes in circulation reached the low point of 7.8%. On the basis of this balance sheet statement, the Reichsbank declared a moratorium on all transfers under the standstill agreements.

There can be no doubt that the gold and foreign exchange policy of the Reichsbank from 1924 to 1931 played an important role in its attempt at central bank control. The reichsmark was a managed currency—and a currency that required at all times active regulation on the part of the Reichsbank. The objectives of the Reichsbank for its gold and foreign exchange policy were 1) to maintain the stability of the reichsmark in terms of the foreign exchanges and 2) to maintain the legal coverage for Reichsbank notes in circulation and to acquire sufficient marginal cover to protect its own Giro deposits and Rentenbank notes. In addition to these two main tasks, the gold and foreign exchange policy was used as a supplement to the discount policy of the Bank.

The Maintenance of Currency Stability

The Reichsbank was wholly successful in maintaining the stability of the reichsmark in terms of the foreign exchanges throughout the entire period under discussion. An examination of the pound and dollar quotations in the Berlin market from 1925 to 1931 (Chart VI) brings out the comparative stability of the reichsmark. The dollar was never permitted to fluctuate very far nor for very long above or below par. As was to be expected, since the dollar remained throughout the entire period the guide to Reichsbank policy, the dollar fluctuated less widely than the pound. After July 1931, the reichsmark remained (and still remains) theoretically stable at its old gold parity. After the pound and the dollar were divorced from gold, the reichsmark was linked to the quotations of the gold bloc currencies.[26] Up to 1931, however, the Reichsbank was

25 *Untersuchung des Bankwesens, op. cit.,* Part II, p. 454.

26 Since the gold bloc was dissolved late in 1936, the quotations of the reichsmark in terms of foreign currencies are purely nominal.

able to buy and sell foreign exchange in the open market in order to control the price. Now, of course, open market dealings are forbidden under rigid penalties and the entire foreign exchange business is centered in the Reichsbank. The old theory of gold as the automatic regulator of price levels and the trade balance was abandoned by the Reichsbank in favor of a managed currency in 1924 just as it was abandoned by the United States in 1920. The Reichsbank had the advantage over the Federal Reserve banks of recognizing from the start the objectives of its control technique, and of using its gold and foreign exchange holdings consistently to achieve those ends.

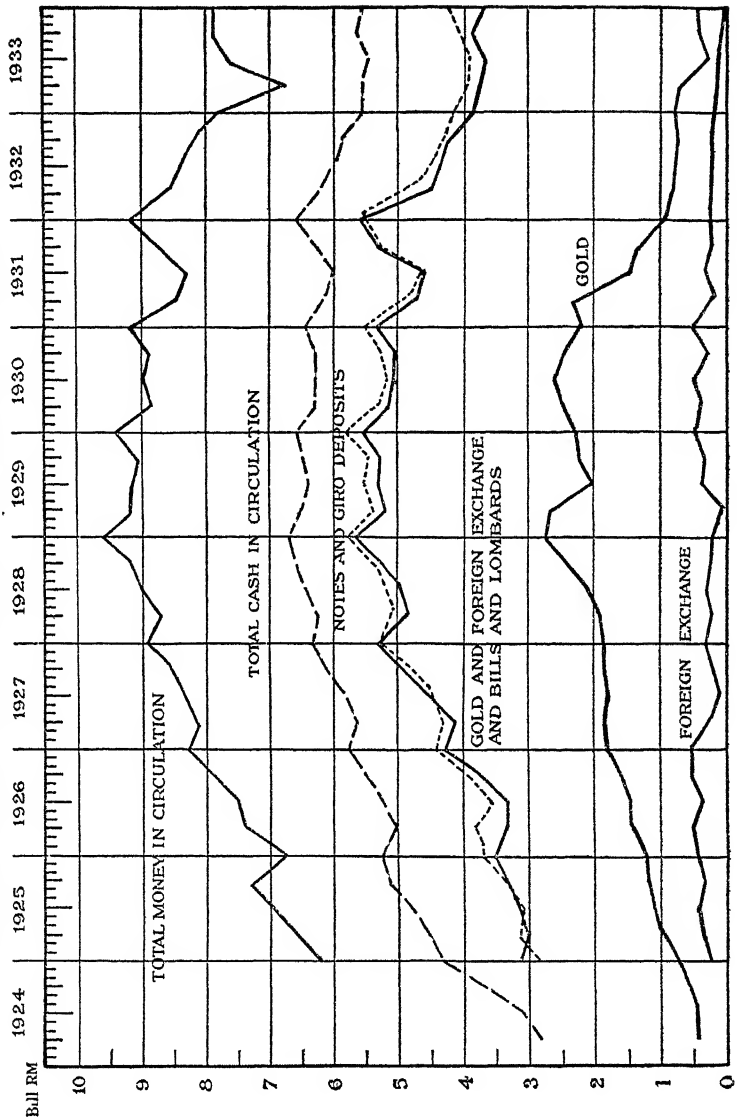
The Maintenance of the Legal Coverage

The legal cover percentage for Reichsbank notes in circulation was maintained from October 1924 to the end of June 1931. Not only was the legal coverage for Reichsbank notes secure throughout the entire period, but the Reichsbank held sufficient margin to provide a gold reserve for its Giro deposits and for Rentenbank notes. The average cover percentage was 56.5% in 1925, 69.9% in 1926, 50.3% in 1927, 52.2% in 1928, 52.1% in 1929, and 59.5% in 1930.[27] The general relationship between foreign exchange and gold held by the Reichsbank and total cash in circulation and total money in circulation is shown in Chart VII.[28] There is a remarkable similarity in the movement of gold holdings of the Reichsbank and the fluctuations in total cash and money in circulation for the first five years of the decade. In the last

27 *Ibid.*

28 Plotted from statistics in *Untersuchung des Bankwesens, op. cit.,* Part II, pp. 435-545; *Vierteljahrshefte zur Konjunktur Forschung,* 1924-1933; and *Statistisches Jahrbuch für das Deutsche Reich,* 1924-1933. The figures for total money in circulation exclude the demand deposits of the private and public banks, although it includes the deposits kept by these banks in the clearing house (*Abrechnungstelle*). The improved balance sheets of 1928 for the first time separated short-term (7 day) deposits from total deposits. The total figures for December 31 of each year from 1928 on are published in *Untersuchung des Bankwesens,* Part II.

CHART VII. GOLD AND FOREIGN EXCHANGE HOLDINGS OF THE REICHSBANK; TOTAL COVERAGE FOR REICHSBANK NOTES AND GIRO DEPOSITS; TOTAL MONEY IN CIRCULATION, 1924-33



five years, however, the relative movements of these two graphs bring out the monetary effects of depression and financial panic. Cash in circulation increased rapidly from 1924 to the end of 1928; gold holdings of the Reichsbank followed the same trend. Cash remained practically stable throughout 1929, while the Reichsbank gold holdings reflect the results of the 1929 withdrawals. The year 1930 brings out the effect of depression. Total cash in circulation decreased gradually as price levels declined, while the gold holdings of the Reichsbank increased both absolutely and relatively in the first half of the year and decreased in the latter half because of panic withdrawals. There is to be noted here only a very slight increase in total cash in circulation as the result of the September-October monetary crisis. If one compares this increase with the very sharp rise in the curve in the second half of 1931, he realizes that the 1930 crisis was not widespread enough to cause hoarding in Germany. The 1931 crisis, however, caused a marked increase in total cash in circulation.

The relationship between the total Reichsbank coverage and its notes and Giro deposits shows clearly the close care given by the Bank to the maintenance of a sound currency. At all times, from 1925 to the end of 1933, Reichsbank notes and Giro deposits were backed by liquid assets. Until 1931 these assets maintained, as we have seen, the legal gold and foreign exchange percentage. After June 1931 the assets covering notes and Giro deposits were increasingly made up of bills of exchange. Although the provision of the Bank Act which required a 40% gold cover was repealed on July 7, 1931, the other coverage provisions of the Act remained in force. As gold and foreign exchange declined, the Reichsbank substituted three-month trade bills and bank acceptances for note cover. Until the October 1933 changes in the Bank Act, money in circulation in Germany, in so far as it was made up of central bank notes, was covered by commercial paper. The Reichsbank succeeded during the entire ten years in providing Germany with a sound currency adequately backed by liquid assets.

Gold and Foreign Exchange Policy as a Supplement to Discount Policy

The Reichsbank, as the central note bank, can put money into circulation as its bill discounts increase or as its holdings of gold and foreign exchange increase. Banks, forced to improve their cash position, depend upon the central bank either for rediscount credit or as a market for foreign exchange. In so far as the open money market can supply the cash needs of the banks, they are independent of the central bank. As we have seen, the presence of large amounts of foreign funds in the Berlin market tended to decrease the bill business of the money market and to increase the foreign exchange business. The Reichsbank discount rate, therefore, frequently lost touch with the market. Although the Reichsbank buys domestic bills in the open market, it never sells them from its own portfolio to bring pressure to bear upon money market interest rates. The Reichsbank adopted a more or less passive attitude toward its bill portfolio as a control device and relied only upon increases or decreases in bank rate to control the amount of rediscount credit granted by the central bank. With its gold and foreign exchange holdings, however, the Reichsbank adopted an active control policy and bought and sold foreign exchange in the open market, not only to maintain the exchange stability of the reichsmark, but to increase or decrease the amount of cash in circulation. As the foreign exchange business of the money market increased in relative importance, the open market policy of the Reichsbank in regard to purchases and sales of foreign exchange held increasing significance for the money market banks.

The Reichsbank's control over the money market, therefore, was much greater than would be supposed from a study of its discount policy alone. There was, in the first place, the possibility that the Reichsbank would permit foreign exchange rates to sink under parity. This possibility forced the money market banks to cover all foreign exchange commitments with forward contracts. In so far as forward contracts to purchase and to sell were equalized, forward exchange had the effect of minimizing speculative transfers of foreign funds and of balancing the supply and demand of foreign exchange in the open market. In the second place, the large foreign exchange holdings of the Reichsbank, if sold on the open market, had the effect of tightening the cash position of the money market banks and of making fresh inflows of foreign funds relatively less attractive.[29] This discouragement of foreign funds was successful only within the limits of the Reichsbank holdings as compared to the total supply and demand of foreign exchange. In the third place, the month-end open market operations of the Reichsbank in foreign exchange enabled the Bank to meet the cash demands of the banks without increasing the amount of money in circulation. The Reichsbank prepared beforehand for the month-end cash demand by selling foreign exchange in the open market. This not only forced the banks more quickly to the Reichsbank for support credits, but also tended to keep the Reichsbank in control of the foreign exchange business and therefore of the money market.

In spite of the fact that the gold and foreign exchange policy was conditioned at all times by the amount of foreign funds in the Berlin market, the Reichsbank was, nevertheless, able to use the foreign exchange market to its own advantage. In the face of oppressive handicaps, the central bank made the most of its gold and foreign exchange policy as a control technique.

29 See Chapter IV, pp. 146-151.

CHAPTER X

CREDIT RESTRICTION POLICY

CREDIT restriction and credit rationing have come into prominence as techniques of a central bank control only in the postwar period. In theory and in practice they are devices radically opposed to control through bank rate increases or decreases, since they inject into the whole question the idea of qualitative regulation of credit. The quarrel over the relative merits of quantitative versus qualitative control techniques is one that strikes deeply into the roots of economic theory. Quantitative control, or more specifically control through discount policy, is a device ideally suited to nineteenth-century classical and neo-classical economic thinking. Historically, the development of the one was contemporary with the development of the other. Quantitative regulation of the means of payment requires a minimum of interference with the economic life of the nation. Success is achieved through the automatic response of supply and demand to increases or decreases in the cost of credit. The central bank assumes no responsibility for the selection of the types of credit paper offered for rediscount, nor does it undertake to guide credit into specific economic channels. Control through bank rate drops out of the market or pulls into the market the marginal demand—the marginal demand is assumed to be less desirable than the supermarginal. Qualitative regulation, on the other hand, gives to the central bank the right to select—on the basis of some predetermined standard—the desirability or the undesirability of particular credit demands.

The real question at issue in all such controversies revolves about the *method* of attaining the objectives of the central bank. Are the "best" results obtained through dependence on the demand-supply-price mechanism, on the theory that in the long run the "best" producer is the one capable of producing at the lowest costs of production? Or are the "best" results obtained through prior selection of desirable industries; *desirable,* in this case, being interpreted as those which fit in with a pre-determined plan? Qualitative credit regulation is a post-war expression of the old relationship of the state to the economy.[1] In its newer form it is bound up with the highly controversial topic of economic planning.

It is our purpose here, as it has been from the beginning, to focus our attention on the objectives of the Reichsbank and to study each particular technique from the point of view of its success or failure in attaining the end in view. It is essential, of course, to watch the effects, foreseen and unforeseen, of that technique on the entire economic organization and to ask ourselves whether or not any other technique would have been likely to have achieved the same result more smoothly or more efficiently. This latter question (which one cannot avoid) is, however, to a large extent idle speculation, in that its answer rests upon value judgments incapable of final proof.

The Operation of Credit Restriction

Credit restriction is a drastic means of credit control in any money and banking system in which the central bank holds the monopoly power of note issue or of control over other ultimate banking reserves. The restriction of bill discounts to a specified amount cuts the private banks off from their customary dependence on the central bank, and forces them to assume the full responsibility for all further cash demands. The effectiveness of credit restriction is thus bound up with the theoretical problem of the limits to bank credit creation. In a highly integrated banking system with a central bank functioning as the lender of last resort, the responsibility of guarding the expansion of credit rests upon the central bank. Private banks are required to keep enough till cash to meet current demands, but all extraordinary demands for cash are

1 Werner Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank,* 1924/1926, p. 9. I am indebted to this book for a large part of the material contained in this chapter.

supplied through the rediscounting of bills with the central bank, or through borrowing on the basis of long-term securities. The ultimate limits to bank credit creation in such a system are set by the legal limitations placed upon the central bank in regard to its own notes in circulation. Private banks need assume only the responsibility of keeping a certain relationship between different kinds of deposits and investments. They must see to it that they have a sufficient amount of short-term assets to meet demand liabilities. Any asset is considered a short-term asset which, normally, is salable to the central bank.

If the central bank fixes the limits of its bill discounting, the private banks must immediately change their lending policy to conform to the total amount of central bank credit available. An increase in discount rate affects the banking system only indirectly; rediscounting becomes more costly, but a bank's charges for discounting may also increase. The decrease in total bank loans may be achieved without violently disturbing the structural relationships in the economy. With credit restriction, however, a direct pressure is brought to bear upon the banks that makes them shift their entire lending policy in order to take upon themselves the responsibility for cash payments. The effect of credit restriction on the private German banks was 1) to increase their till cash, 2) to increase their Giro deposits with the Reichsbank and also their demand deposits with other banks, 3) to decrease their investments in bills, reports, lombards and acceptances, 4) to increase short-term loans in relation to long-term loans and to shorten the time of even short-term loans as far as possible, 5) to increase collateral security loans and to decrease unsecured business loans, 6) to increase the interest charged for loans, and 7) to increase the interest paid for cash deposits.[2] The scramble for the highest possible degree of liquidity hence brings with it far-flung consequences for the entire economy.

2 Werner Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank*, 1924/1926, p. 22.

The short-term money market becomes more liquid and the capital market is depressed. Customary banking facilities for the financing of goods-in-process are withdrawn or distorted in favor of the support of the finished goods industries. Semi-finished and capital goods industries suffer for lack of capital and agriculture is particularly hard pressed.

Since credit restriction brings with it the rumblings of an economy forced to make sharp structural realignments, it is inevitable that credit rationing should go hand in hand with credit restriction. Some method must be adopted to save the "desirable" industries from the collapse that would otherwise occur because of the lack of normal bank support. If the central bank (as is the case in Germany) has the right to make direct loans to industry, some of the burden of lending can be taken over by the central bank itself. On the one hand, it gives up its position as a banker's bank, and on the other it takes on more of the functions of a private lending institution. One would expect to find, therefore, that a larger portion of the central bank's bill portfolio would be made up of direct discounts for industry and a smaller proportion of bank rediscounts. In so far as this process is carried on within the limits of the central bank's total allotment of credit, the banks receive a smaller and smaller proportion of the total and thus must further increase their efforts toward liquidity. Rationing may also take the form of concessions on the part of the central bank in return for some special service. Thus, one bank may be excepted from the general restriction in return for its agreement to meet the credit needs of one particular element in the economy, such as, for instance, the Reichsbank's arrangement with the *Preussenkasse* to handle agricultural bills, or its arrangement with the Berlin money market banks to grant acceptance credits.[3]

The success of credit restriction as a control device depends upon the extent to which the central bank has control over the

3 See below, p. 379.

entire banking system. It depends on the degree of dependence of the banking system upon the cash reservoir of the central bank; and it depends on the money market institutions and habits which give to the bank its control position. It is, at best, a temporary device, and because of its severity is justifiable only in the light of the objectives of the Bank if such objectives are considered "worth while" in spite of the adverse results to the economy of the means applied.

Credit Restriction, April 1924 to August 1924

The Reichsbank inaugurated its policy of credit restriction on April 7, 1924. Some control action was essential on the part of the central bank because the speculative boom of the rentenmark cycle had got out of hand. As was pointed out above,[4] the first effect of stabilization had been severe depression in Germany. This was quickly followed by a renewed business boom which had its roots in the speculative fever left over from the inflation. It had its stimulus from the careless credit policy of the Rentenbank and of the Reichsbank. These two banks were practically the only institutions at this time capable of putting money into circulation and there was a tremendous pressure upon them for business credit. At the end of December 1923, the Reichsbank, the Rentenbank and the private note banks had together only 609 million marks of loans outstanding. This figure increased to 1,153 millions at the end of January, to 1,543 millions at the end of February, and to more than two billion marks at the end of March.[5] This proved to be too rapid an increase of credit for the maintenance of the stability of the new rentenmark.

It must be remembered that the rentenmark at the time was a currency not firmly established. Dealings in paper marks were still going on side by side with rentenmarks, gold marks,[6] and

4 See Chapter V, p. 166.

5 Schacht, *Stabilization of the Mark*, *op. cit.*, p. 15.

6 There was no gold currency in circulation in Germany at the time; the gold mark was purely an abstraction based upon the Government's gold

foreign exchange. All transactions in different currencies carried with them different rates of interest. To complicate the picture, the public banks, led by the Seehandlung, were using public funds on deposit with them to speculate in the stock market in old paper mark securities. There was also developing a foreign exchange speculation in the paper mark and the French franc. The inevitable result was a rise in the price level and a fall in the foreign exchange quotation of the rentenmark. The wholesale price level increased from an index number of 117.3 in January 1924, to 124.1 at the beginning of April.[7] The gold value of the rentenmark as measured by foreign exchange quotations decreased from an average of 100.42% in January 1924 to an average of 94.21% in March.[8]

Dr. Schacht,[9] in speaking of this period, says: " . . . the rapid increase in the quantity of money was only in part compensated by a reduction in the rapidity of circulation. The confidence of the business community in the stability of the currency was still only very slight; and in consequence such hidden reserves as private enterprise still held in the form of stable capital assets, whether in the shape of Devisen (foreign exchange) or of material values, were not drawn on as cover for credit requirements. Everyone tried first to get as large credits as possible in the new money without touching their reserves. The result was an increase of internal consumption and imports, while exports declined. It was an orgy of improvidence,

loans of August 1923 and the gold promises attached to certain State and private loans. In stabilization, the gold mark and the rentenmark were identified. Dealings in gold marks were therefore on the one hand related to the rentenmark, and on the other to the credit standing of the Government; they were speculative in the same sense that all money in Germany was speculative.

7 *Ibid.*, p. 15.

8 *Wirtschaft und Statistik*, Volume V, 1925, p. 101.

9 Dr. Schacht was at this time the Currency Commissioner as well as president of the Reichsbank. As Currency Commissioner he had full powers to take any steps he considered necessary to protect the stability of the rentenmark.

of disbelief in the whole effort, and of that habit of extravagance which was begotten by the distress of inflation, when money seemed no longer to have any value. One factor which operated to enhance the demand for credits was the fixing by the Reichsbank of its discount rate for stable credits after December 29, 1923 at 10% per annum, while the interest rates of the open market in view of the dearth of capital were still much above this figure." [10] Dr. Schacht, therefore, places the full blame for the beginning of the rentenmark boom on the cheap credit policy of the Reichsbank. He himself takes full blame for permitting the speculation to proceed as far as it did without a check. "I can only reproach myself for not having paid proper attention in good time to these developments on the internal credit markets," he continues, and points out that one reason was his constant absence from Berlin in connection with the plans for the foundation of the Gold Discount Bank, which required the consent of the Dawes Committee, then sitting in Paris. The other reason was the dire need of agriculture for credit, which forced the Reichsbank to bear almost the entire burden of agricultural finance.

Nevertheless, the Reichsbank attempted even prior to the policy of credit restriction to develop sound principles for its own loans. "A 'stable currency clause' was insisted on in all credits; and credits were supposed to be granted only for legitimate trade in commodities or for production. . . . Before coming to the Reichsbank for loans, firms were to be induced to sell their holdings of securities and Devisen and all surplus stocks of goods ".[11] That the Reichsbank would not hesitate to act energetically was shown by its action in February 1924, when it discovered that its regulations requiring banks and firms to accept no foreign exchange orders without full rentenmark cover were being disobeyed. The Reichsbank excluded the banks and firms concerned from its Giro clearing facilities and/or bill credits. The firms concerned were five Berlin banks

10 Schacht, *The Stabilization of the Mark*, *op. cit.*, pp. 152-153.

11 *Ibid.*, p. 155.

(one a Berlin Great Bank) and large firms in Baden, in Schleswig-Holstein, in the Rhineland, and in Silesia. " The entire Reich therefore had thus been given a visible warning signal." [12]

A complete understanding of the conditions present in Germany in April 1924 precludes any possibility of arguing that the Reichsbank *should* have controlled this situation through an increase in its discount rate. If one admits that the two objectives of the Reichsbank were desirable and essential—the maintenance of the stability of the rentenmark and the " purging " of the economy of its speculative fever—it is difficult to argue that these ends could have been achieved through bank rate increases. In the first place, the Reichsbank was not at the time a banker's bank. Although it was practically the sole credit source, its loans were made directly to industry and agriculture, rather than indirectly through the money market banks. The private money market banks held very few assets that were rediscountable with the Reichsbank, and practically no lombardable securities. The public banks, with public funds at their disposal, were making huge loans to private industry at high daily money rates of interest. The cost of credit seems to have been no check upon the willingness of certain borrowers to borrow. In the second place, a discount rate designed to control money market rates of interest would have had to be as high as 20 or 30%. Aside from the fact that it was doubtful whether such a discount rate would have had any retarding influence on the amount of borrowing in the money market, it was certain that such a rate would have penalized agriculture to a point where the food supply of the nation would have been endangered. It is also quite probable that a bank rate of such proportions would have intensified foreign and domestic speculation in the rentenmark and thus have further weakened the currency.

On the other hand, it was equally true that credit restriction on the part of the Reichsbank could have comparatively small

12 *Ibid.*

effect on the public banks in the money market, since these banks were at the time wholly independent of the Reichsbank. The cheaper Reichsbank credit was available for agriculture and for certain industries, but the total amount was small and incapable of supporting the entire economy. The Reichsbank rate of 10% was completely out of touch with money market rates of interest and represented in no way a normal interest rate—normal in the sense of a rate representative of the supply and the demand for credit. Furthermore, if credit rationing meant simply the rationing of the limited supply of Reichsbank credits, leaving other sources of funds untouched, it was also of doubtful strength as a control device.

The Reichsbank program during this period added to the restriction and rationing of Reichsbank discounts the wider task of the centralization and control of public funds, the rebuilding of the private discount market, and the opening of new sources of credit to the economy. All of these activities of the Bank must be judged as a whole, since they were all parts of its plans for the rebuilding of the German economy on a sound financial basis.

On April 7, 1924 the Reichsbank ordered all of its branches to grant to no firms any larger discount and/or lombard credits than it had on that date. This meant that the first effects of restriction were to penalize those firms that happened not to be in debt to the Reichsbank on that day and to give a temporary advantage to firms already in debt. However, as these loans were repaid (none was for more than eight weeks), the total Reichsbank credit available was pooled and re-allotted to borrowers. Unfortunately, it is not known just how the Reichsbank re-allotted its restricted credits. To some extent, the development of standards for Reichsbank loans and discounts had gone on prior to the introduction of its restriction policy. As was mentioned above, these requirements were concerned primarily with the assurance on the part of the Reichsbank that the borrowing firm had no other source of funds such as salable goods and securities, or devisen. Since one of the objectives of restriction was to draw all available resources of the economy out of hoarding, it is safe to assume that this requirement remained in force. Aside from this, the rather vague term "the guidance of funds into productive channels" is the only other key to the policy of the Bank toward its rationing of discounts. One must include under "productive" agricultural borrowers and one must exclude speculators of all sorts; aside from these two classifications, there is no certainty as to what industries were considered productive.

In the absence of any definite information as to the standards set up by the Reichsbank for credit rationing or as to the actual use made by borrowers of Reichsbank credits, it is impossible to evaluate the success or failure of this aspect of the Reichsbank's control policy. It is frequently alleged that vested interests played a large part in the ability to get loans from the Reichsbank and that large amounts of funds so borrowed were re-loaned by the borrowers at the higher rates of interest prevailing in the open money market. This may be true for some part of the funds allotted by the Reichsbank, but it must be remembered that the Reichsbank with 500 branches throughout the Reich was in close touch with its borrowers and had the opportunity to watch the effects of its lending policy rather carefully. It might be argued, of course, that 500 branches scattered throughout the Reich could not be expected to develop lending standards that could give unity and coherence to rational planning and even increased the possibility of the misuse of Reichsbank funds. That the Reichsbank was dealing a severe blow to vested interests should be borne in mind in judging the merits of the virulent attacks upon the Bank at this time. It would be extremely interesting, in the interests of unbiased judgment and a furtherance of our knowledge of central bank control techniques, to have more complete information.

The development of the Reichsbank loans and discounts together with its total notes in circulation and the increase in its foreign exchange holdings is shown in the following table:

TABLE XL. REICHSBANK LOANS AND DISCOUNTS, NOTES IN CIRCULATION, AND OTHER ASSETS

April 7, 1924 to August 7, 1924 [a]
(In millions of reichsmarks)

Date	Bills and checks	Lombards	Total	Loans to Reich and to States	Loans to private customers	Total	Notes in circulation	Other assets [b]
April 7	1,867	132	1,999 [c]	423	392	815	683	212
May 7	1,885	134	2,019	465	358	823	787	292
June 7	1,953	118	2,071	518	328	846	954	525
July 7	1,871	92	1,963	491	320	811	1,106	767
August 7	1,800	55	1,855	443	356	799	1,202	993

[a] Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.*, p. 50. His figures were taken from the *Frankfurter Zeitung.*

[b] This item, "other assets," is made up very largely of foreign exchange.

[c] This figure of the total amount of Reichsbank bills and lombards on April 7, 1924 differs slightly from the figure of 1,997 million reichsmarks quoted in *Die Reichsbank, op. cit.*, p. 63, ftn., and from the figure of 2,000 million reichsmarks quoted by Dr. Schacht in *The Stabilization of the Mark, op. cit.*, p. 161.

During the first four months of the credit restriction policy, the total bill and lombard position of the Reichsbank remained remarkably stable, fluctuating from a low point of 144 million reichsmarks below its April 7 position to seventy-two million reichsmarks above. At the same time its loans to the Reich, to the States, and to private customers fluctuated within very narrow limits. Nevertheless, the total notes in circulation increased steadily from 683 million reichsmarks on April 7 to 1,202 million on August 7—a total increase of 519 million reichsmarks. This increase in notes must be looked upon as a lightening of the rigidity of credit restriction and can be attributed to an increase in the foreign exchange holdings of the Reichsbank. The increase in the foreign exchange holdings of the Reichsbank meant that its policy of drawing on hidden reserves in the German economy was successful under the pressure of credit restriction.

The Gold Discount Bank, founded on the 7th of April, further mitigated the effects of credit restriction. The Gold Discount Bank had at its command not only its ten million pound sterling capitalization, but also a rediscount credit in London of five million pounds guaranteed by a consortium of English bankers, a rediscount credit of $25,000,000 from a New York bank consortium, and twenty-five million Swiss francs from a group of Swiss bankers. This meant that about 300 million rentenmarks of new credit were available for the export industries.[13] The increase in the business of the Gold Discount Bank is shown in the following figures of its total bill discounts:[14]

May 7, 1924	998,695	pounds sterling
June 6, 1924	6,511,764	" "
July 7, 1924	12,531,063	" "
Aug. 7, 1924	13,751,115	" "
Aug. 15, 1924	13,663,391	" "

Not only did the Gold Discount Bank broaden the credit base of the economy but it guaranteed stability to the export industries and gave to them a fresh impetus to production. Its activities relieved the Reichsbank from pressing foreign exchange demands and thus made it easier for the Bank to hold the currency stable.

The first steps toward control over public funds were taken in April 1924. As a result of a conference between the Reich Finance Minister and the president of the Reichsbank, Giro postoffice deposits were placed completely under Reichsbank control.[15] The Government also took further steps to restrict the lending policy of the savings banks. After May 23 no savings bank could grant loans in excess of the total amount of its cash deposits and all such loans were limited to the terri-

13 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.*, p. 52.

14 *Ibid.*, p. 66. See above, Chapter II, p. 64.

15 *Ibid.*, p. 52. These amounted to about 100 million reichsmarks.

tory in which the bank functioned, and were supposed to be only " productive " loans. Furthermore, the savings banks were required to lend at the cheapest rate prevailing in the market for similar loans. Any surplus cash had to be deposited with the regional Girozentralen or with the *Preussenkasse*. The Girozentralen and the *Preussenkasse* were subjected to Reichsbank control.[16] These funds the Reichsbank placed at the disposal of agriculture by agreeing to rediscount for these banks unlimited amounts of agricultural bills. A further step to relieve agriculture and to finance the harvest was taken in July 1924, when the Reichsbank arranged with the Seehandlung for a 200 million reichsmark loan to agriculture in return for Reichsbank agreement to rediscount these bills.[17] During the summer of 1924, the Reichsbank made one small attempt to rebuild the private discount market. The Seehandlung agreed to rediscount three-month trade bills and bank acceptances to the amount of forty million reichsmarks for the member banks of the *Stempelvereinigung* at 13%. The Reichsbank in turn agreed with the Seehandlung to rediscount these bills after they had run for one month at 12%.[18] Thus, although credit restriction was in full force, the Reichsbank definitely broadened the base of the credit economy through pulling hidden reserves out of hoarding, through the establishment of the Gold Discount Bank, through checking speculative uses of funds in the public banks and the savings bank, and through granting exceptions to credit restriction. It had, to a very small degree, centralized public funds and directed them to uses considered desirable.

The first effect of the credit restriction policy was a sharp and severe credit crisis in which banks and businesses were thrown into bankruptcy, and a " storm of indignation " shook the entire country. Banks and businesses that had participated in the speculative boom found themselves unable to repay their

16 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.*, p. 53.

17 *Ibid.*

18 *Ibid*

borrowings. The concern banks—the specialized industrial banks—were particularly involved. These institutions had appeared during the inflation and disappeared, to a very large extent, with the collapse of the last speculative boom. The Berlin Great Banks were in a better position than other banks since they had held aloof from the previous over-extension of loans. Their balance sheets on December 31, 1923 showed 60% cash and bank deposits to total liabilities (as compared with 10% on December 31, 1913).[19] Nevertheless, these banks had developed a lending policy that forced them to depend upon the cash reservoir of the Reichsbank, and the sudden withdrawal of this reservoir caused them to limit their loans and to become even more liquid than before.

The effect of credit restriction on money market rates of interest is shown in the following figures:

TABLE XLI. DAILY AND MONTHLY MONEY INTEREST RATES
April 1, 1924 to August 20, 1924[a]

10-day average	Daily money	Monthly money
April — 1st 10 days	35	44
2nd "	27	48
3rd "	52	61
May — 1st 10 days	48	67
2nd "	11	42
3rd "	12	28
June — 1st 10 days	12	35
2nd "	10	34
3rd "	10	24
July — 1st 10 days	11.8	22.8
2nd "	9.0	16.8
3rd "	10.8	16.7
August — 1st 10 days	10.1	15 0
2nd "	9.5	12.3

[a] *Ibid.*, figures from *Frankfurter Zeitung*, and quotations on the Berlin bourse.

19 *Ibid.*

Daily money interest rates decreased immediately after the announcement of the credit restriction policy of the Reichsbank, probably because of the sudden collapse of the existing speculative boom. As the banks began to retreat from their former lending policy in favor of a high degree of cash liquidity and as business began to clamor for funds, daily money rates rose sharply to an average of 52% for the last ten days of April. Many firms were forced to borrow at these high rates for wage purposes. After the month-end settlement day was safely over, however, daily money rates began to drop until by the end of the second ten days in May the average was as low as 11%. From this time daily money rates fluctuated above or below the Reichsbank discount rate, but never more than 2% above. As a result of credit restriction, the market for daily money became comparatively liquid and remained so throughout the entire period. The effect of credit restriction on monthly money interest rates was more protracted. Although by the end of the second ten days in May monthly money rates were below the figures for the first ten days in April, the rates were still very high. Credit restriction had the effect of making daily money loans more attractive to the banks than monthly money loans. Monthly money rates, however, began to drop steadily after the first of June and by the middle of August they were only 2.3% above bank rate.

On the 4th of June, the Reichsbank was able to announce that all requests for foreign exchange could be granted. This was due more to the decrease in demand than to the increase in supply, although that too had increased rapidly. The demand for foreign exchange in March was 400 million gold marks, on May 6 it was 200 million, by May 24 only 110 million, and by June 4 only four million gold marks.[20] This rapid decrease in demand was due in part to the decreasing speculation in foreign currencies, in part to the increasing bankruptcies which cut off a portion of the demand, but in large part to the increasing activities of the Gold Discount Bank, which relieved the

20 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.*, p. 65.

Reichsbank of the necessity of providing foreign exchange for export and import industries. The foreign quotations of the rentenmark increased until the gold value of the currency was at par or above. The rentenmark stood at 94.84% in April, increased to 98.49% in May, to 100.42% in June, and to 100.5% in July and August.[21] By mid-summer the sharp credit crisis was over. The share market had improved, the foreign exchange market and goods market had strengthened and there was a decrease in the credit demand. Dr. Schacht summarizes his view of the credit restriction policy up to this time as follows:

> For weeks and even months there was no departure by so much as a centimeter from the line of credit restriction which we had laid down, until the desired success was attained. The success was a double one—a material success because it saved the currency, and a psychological success because it broke down the opposition, open and secret, of the inflation profiteers to the currency and to the policy of the Reichsbank. From those weeks onwards there are no longer any traces of the belief or the hope or the fear on the part of the German business world that the Reichsbank would ever again give economic or political interests priority over the claims of the currency. Not only the currency, but also the belief in the currency, was made stable by this action on the part of the Reichsbank, and the belief was not evoked by long argument and persuasion, but imposed by the act.[22]

There can be no doubt that credit restriction from April 7 to August 1924 was successful in accomplishing the objectives of the Reichsbank. The stability of the currency was assured. The credit stringency had paralyzed the post-inflation attempt to maintain high speculative profits. Furthermore, credit restriction proved to be an effective bargaining tool in the hands of the Bank. With promises of relief from credit restriction

21 *Wirtschaft und Statistik*, Volume V, 1925, p. 101. Quotations in percent of par.

22 Schacht, *The Stabilization of the Mark*, *op. cit.*, p. 157.

the Reichsbank could control the lending policies of certain banks and direct funds into channels designed to rebuild the money market and to provide credit for " legitimate " trade, industry and agriculture. The fact that Germany had succeeded, unaided, in pulling herself out of the inflation and in holding her new currency stable against heavy odds proved to be an advantage to her in the international negotiations then being conducted. Although distrust of German monetary policy led to the international safeguards in the Dawes Plan, the German delegates were able to gain many concessions on the strength of the success and determination shown in their own efforts toward stabilization. The first period of credit restriction put an end to the inflation, but at a cost of " tears, bitterness, and despair beyond all measure."

Credit Restriction, September 1924 to June 1925

In spite of the fact that the Reichsbank could point to the success of its credit restriction policy in the summer of 1924, the Bank did not abandon credit restriction when its immediate objectives had been attained. The decision to continue the policy of credit restriction instead of adopting the more usual policy of control through discount rate was a further expression of the Bank's determination to enter qualitatively into the reconstruction of the German nation. By the early autumn of 1924, Germany was entering into the brief business revival induced by the successful conclusions of the negotiations of the Dawes Committee. Production was stimulated, unemployment decreased, money began to be deposited in the banks, which made it possible for them to resume their old place in the economy, and, most important of all, banks and businesses were able to borrow in foreign markets.

The attitude of the Reichsbank toward the problems presented by the German economy at this time was conditioned by its belief that the German nation had to be made to realize its essential poverty; that the purging process of the deflation had not been completed; and that more credit, either domestic or foreign, was not the solution of the basic difficulties. The Reichsbank considered credit restriction still essential because it believed that only through the direction of available capital to " productive " ends could the necessary structural realignments take place. From the standpoint of the Bank, this required further mobilization of available capital, the rebuilding of the private discount market, the stimulation of domestic savings, and retrenchment in public and private expenditure. With this attitude toward the problems of the German economy, credit restriction was a better tool of control for the Reichsbank than discount policy because it gave to the Bank a strategic position in its relationship to the banks, to the money market, and to private industry. As long as credit restriction was in force, the Reichsbank could ration its available discount facilities and direct them to " desirable " ends. It could offer special inducements to banks to use their funds in particular directions by excepting such funds from the total allotment. And, too, it could bring particular pressure to bear on any one bank or business that it considered " undesirable ".

Although the restriction of credits was still in force, the Reichsbank progressively lightened the burden and shifted its emphasis to the rationing and rebuilding phases of its restriction policy. Credit restriction from the autumn of 1925 onward did not mean so much *tight* credit as it meant *directed* credit. Here again it must be pointed out that the determination of Reichsbank standards for the rationing of its discount credits can be approached only indirectly.

In September 1924, the Reichsbank admitted three-month bills to the rediscount privilege for the first time, and in October credit restriction was lightened by an increase of 10% in the total credit allotment. By the end of the year, however, the Reichsbank's policy of credit restriction was hampered by the first flow of foreign funds toward Germany. It is estimated that by the end of 1924 at least one and one-half billion reichsmarks of foreign loans had come into the country.[23] This meant

23 Schacht, *The Stabilization of the Mark*, *op. cit.*, p. 72.

an inevitable increase in the note circulation of the central bank and therefore a further lightening of the effects of credit restriction. It must be remembered, however, that 800 million reichsmarks of this amount represented the proceeds of the Dawes Loan, so that the total amount of private foreign borrowing was still comparatively small. Nevertheless, in so far as foreign exchange led to an increase in Reichsbank notes in circulation, the credit base of the German economy was materially improved by the end of 1924. As foreign exchange came into the Reichsbank, the Bank gradually decreased its own credit allotment for the economy, so that by the summer of 1925 the total amount of bill credit granted by the Bank was less than its original allotment. The following table shows the development of the bills and lombard loans of the Reichsbank together with the increase in notes in circulation and the increase in gold and foreign exchange:

TABLE XLII. REICHSBANK LOANS AND NOTES IN CIRCULATION IN RELATION TO GOLD AND FOREIGN EXCHANGE
October 7, 1924 to June 7, 1925[a]
(In millions of reichsmarks)

Date	Bills	Lombards	Total	Gold	Foreign exchange for note cover	Notes in circulation	"Other assets"[b]
Oct. 7, 1924	2,180.8	10 5	2,181.3	594.7	——	1,519.0	864.0
Jan. 7, 1925	1,883.5	8.2	1,891.7	780.6	260 2	1,799.8	1,498.7
Mar. 7, "	1,633.1	8.3	1,641.4	985.2	328.4	2,035 5	1,080.1
June 7, "	1,522.2	4.2	1,526.4	1,015.8	338.6	2,488.1	645 6

[a] *Statistisches Jahrbuch für das Deutsche Reich* 1924/1925; 1926.
[b] Largely foreign exchange not eligible for note cover.

The most outstanding fact brought out by these figures is the rapid increase in the note circulation of the central bank and the direct relationship of that increase to its holdings of gold and foreign exchange. To a certain extent this meant that the Reichsbank was shifting the burden of providing working capital for the German economy onto the foreign markets while it was limiting its own loans and discounts. The Reichsbank at this time was assuming the burden of providing Germany with a sound gold currency when the gold and foreign exchange resources of the economy were extremely small. It had undertaken the responsibility of holding 40% gold and foreign exchange for its notes in circulation plus a 60% commercial paper cover. Domestic bills for note cover were not to be had in sufficient amounts, which forced the Bank to increase its gold and foreign exchange cover percentage. In January 1924, this averaged 62.6%; in February, 63.5%; in March, 65.2%; in April, 60.2%; in May, 57.4% and in June, 58.4%.[24] During this period, the Bank continued its efforts to rebuild the private discount market, using for the purpose increased control over public funds and exceptions to its credit restriction program.

The most important Berlin public banks were the Seehandlung, the *Verkehrskreditbank,* and the *Reichs Kredit Gesellschaft.* To these banks therefore, the Reichsbank turned its attention. In the latter part of 1924 the Reichsbank made an agreement with the Seehandlung to rediscount for it all bank acceptances presented by the bank if the proceeds from rediscounting were used in the market for daily money on the Berlin bourse. In February 1925, the Reichsbank made an agreement with the *Verkehrskreditbank* in an attempt to bring railroad funds to the service of the private discount market. The *Verkehrskreditbank* agreed to purchase in the open market only bills and bank acceptances acceptable by the Reichsbank for rediscount and to purchase only long-term securities lombardable with the Reichsbank.[25] In the same month, in accordance with an agreement with the Finance Minister of the Reich, all postoffice funds were placed at the disposal of the Reichsbank (450-500 million reichsmarks). The

24 *Statistisches Jahrbuch für das Deutsche Reich,* 1926, p. 327.

25 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.,* p. 84.

Reichsbank required the postoffice to keep at least thirty million reichsmarks in Giro deposits with the Reichsbank, one-third of the remainder was to be invested in bills rediscountable with the Reichsbank, and the rest in lombardable securities, State loans or direct loans to State and public banks.[26]

February 1925 also found the Reichsbank taking the first steps to bring bank acceptances back into current favor. The Reichsbank agreed with the member banks of the *Berliner Stempelvereinigung* to rediscount for them bank acceptances up to 50% of their combined capital and surplus. This rediscount credit was not to be counted as a part of the Reichsbank's total credit allotment.[27] In order to provide the necessary third bank signature for these bills, the Reichsbank further arranged with the Seehandlung, the *Verkehrskreditbank,* and the *Reichs Kredit Gesellschaft* to stand ready to rediscount these acceptances for the member banks of the *Stempelvereinigung*. At the end of 1924 the total amount of acceptance credit granted by six Berlin Great Banks amounted only to twenty-three million reichsmarks; by the end of June 1925, this had increased to 231 million reichsmarks. While this was still a small amount compared to the pre-war use of bank acceptances in Germany, it marked a very definite advance toward the rebuilding of the private discount market. The amount was restricted by the Reichsbank as a part of its total program and it was not until May 1926 that the Reichsbank declared itself willing to rediscount an unlimited amount of bank acceptances.

The bank acceptance was the backbone of the pre-war money market. The German economy was accustomed to its use both for domestic and foreign trade, and bank acceptances were widely sought after by lending banks on the bourse. The efficiency of the bank acceptance rests upon its shiftability, which is dependent in turn upon the rediscount privilege. The action of the Reichsbank, therefore, in offering rediscount facilities

26 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank, op. cit.*, p. 85.

27 *Annual Report of the Reichsbank*, 1925, p. 6.

(free from credit restriction) further relieved the credit pressure and opened up a type of finance to German industry that could be used as rapidly as business turnover made it possible. The bank acceptance never regained the place it held in the pre-war economy, but from this time onward it began to be used with greater and greater frequency.

Not only was the Reichsbank mitigating the effects of credit restriction through controlled credit concessions, but it was also taking steps to cheapen interest rates and to decrease the gap between the amount paid for deposits by banks and the amount charged by them for loans. The interest rate charged by the Gold Discount Bank was lowered in October 1924 from 10% to 8%, and a further decrease to 7% was made in May 1925.[28] The Reichsbank's own bank rate was decreased to 9% in February 1925 and at this time the Bank reckoned interest charges for bills of 5,000 reichsmarks and more at a minimum of five days instead of ten days as formerly.[29] This latter change in policy was a further stimulus to the bill market, for it made it possible for the banks to depend upon the Reichsbank for ultimo finance at a cost that made the bill an attractive investment. Through the Gold Discount Bank, the Reichsbank was able to offer slightly higher rates for bank deposits which began to attract public funds from the provinces to Berlin and also had the effect of forcing the Berlin banks to increase their own rates paid for deposits. Thus the Reichsbank was aiding in the structural rebuilding of the money market, on the one hand through broadening the private discount market and cheapening costs to borrowers, and on the other hand through increasing the interest attraction to capital accumulation.

The total deposits (*fremden Gelder*) of six Berlin Great Banks increased from 1,115 million reichsmarks on January 1, 1924 to 4,126 million reichsmarks on June 31, 1925.[30] Savings

28 *Annual Report of the Reichsbank*, 1925, pp. 6 and 8.

29 *Ibid.*, p. 6.

30 Bosch, *Die Epochen der Kreditrestrictionspolitik der Deutschen Reichsbank*, *op. cit.*, p. 86.

deposits throughout the Reich increased more slowly—from 371.7 million reichsmarks on November 31, 1924 to 1,008 million at the end of June 1925.[31] These figures bring out the fact that although there had been definite improvement in the basis of the credit economy by the summer of 1925, there were still serious structural maladjustments. Bank deposits were expanding much more rapidly than savings, which meant that business was forced to finance itself from the short-term money market rather than from the capital market. The Reichsbank still remained the largest single credit source.

Credit Restriction, July 1925 to May 1926

The upswing of the Dawes Loan cycle was short lived. By the summer of 1925 Germany was entering into a long period of depression which lasted until the autumn of 1926. Signs of depression had been apparent early in the spring, particularly in the textile and coal industries. The Berlin Great Banks had come to the support of the coal industry, but in spite of this the depression worked itself out into all fields. As was pointed out above,[32] the full realization of the effects of the war and the inflation on the German economy had been concealed throughout the year 1924, at first because a belief in speculative profits had not yet died out, and later because of a belief that more credit would solve all of the ills of the business world. But domestic capital was slow to accumulate; foreign funds did not come in very rapidly, and German business men found themselves unable to compete successfully in foreign markets.

The Reichsbank had to face the third and most difficult phase of its credit restriction policy. It still saw its task to be the qualitative guidance of funds rather than to provide freer credit. Whereas in the former period the efforts of the Bank had been directed toward the rebuilding of the short-term

31 *Statistisches Jahrbuch,* 1926, p. 347.

32 Chapter V.

money market, in the last period its aim was to rebuild the capital market and to aid in the reorganization of the whole productive process. This general policy of the Reichsbank was stated in its annual report for 1925:

> If the Reichsbank was naturally not in a position to relieve the pressing needs for working capital in the German economy through resorting to the note press, nevertheless it could lighten the situation through satisfying the necessary credit demand within the limits of its currency policy and it could direct the essential creation of long-term capital, both domestic and foreign, into productive ends. The restricted credit policy which was adopted in April 1924 in the interests of the currency could not be given up. Nevertheless through different measures, the pressure of credit restriction was constantly eased and considerable infringements of the allotment took place, especially toward the end of the year, in order to balance certain needs of the economy.[33]

This " balancing " took the form of the reorganization of the entire productive process—the rationalization of production.

The first steps to aid the reorganization of production and to bring the large credit banks to the support of long-term finance of industry were taken by the Reichsbank in June 1925, when it came to the assistance of the Stinnes concern. Prior to the war, Hugo Stinnes had built up one of the largest coal and iron cartels in Germany, a cartel with an international reputation. Following the war, this concern branched out into other fields—shipping, oil, metal, machinery, wood and pulp, chemicals, printing concerns, newspapers, hotels, and even banks.[34] All of these enterprises were joined together through the personal fortune and energy of one man. Unfortunately, Hugo Stinnes died in April 1924 and the sons attempted to continue the expansion policy of their father. Under the pressure of currency stabilization and credit restriction, the concern was able to maintain itself by hand to mouth short-term borrowing,

33 *Annual Report of the Reichsbank*, 1925, p. 3.

34 Schacht, *The Stabilization of the Mark*, *op. cit.*, p. 204.

but by June of 1925 it had reached the limit of its credit and appealed to the Reichsbank for help. The Reichsbank called a meeting of all of the banks involved and arranged a syndicate "to give credit and to liquidate the concern." The firm was completely reorganized on more organic [35] lines and was able in the latter part of 1925 to borrow funds abroad in its own name.

The Reichsbank also came to the support of other large industrial concerns. The banks called in to aid these industries were guaranteed adequate support by the Reichsbank. These first efforts of the Reichsbank toward the financial reorganization of over-capitalized and loosely-joined industries were the beginning of the rationalization movement that finally brought German industry to a high degree of efficiency and placed it, in spite of capital shortage, on an equal competitive basis with other industries throughout the world.

Although the rebuilding of the capital market to its pre-war place in the German economy was a task that was not to be accomplished in the entire ten years under discussion, the Reichsbank began to turn its attention to the direction of available funds into long-term investments. During the latter part of 1925 it began to use a large portion of public money at its disposal in the purchase of agricultural mortgage bonds and in other bonds of the Reich, the States, and the cities.[36] The Reichsbank also used its own pension fund of eighty million reichsmarks to purchase agricultural mortgage bonds. It was early in 1926 that the Reichsbank arranged through the Gold Discount Bank to supply agriculture with long-term credit. The Gold Discount Bank purchased at par from the *Renten-*

35 That is, the firm was reduced to its original business of coal and iron. Most of the post-war businesses were divorced from this concern and reformed into separate industries or were amalgamated with other and stronger firms in the same field of production. The word *organic* is used roughly in the sense of horizontal combinations although it permits groupings of closely related industries.

36 *Annual Report of the Reichsbank*, 1925, p. 7.

bankkreditanstalt 100 million reichsmarks of 7% mortgage bonds to mature in three, four, and five years. The existing mortgage banks were charged with the task of the actual distribution of these loans and also made partly responsible for their repayment. The actual cost to the users of these funds was 7½%—a rate that was then well under the open market rate.[37]

As a further aid to the capital market the Reichsbank admitted a wide number of securities to the lombard privilege of the Bank that had formerly been excluded (especially agricultural mortgage bonds) and increased the lending privilege of lombardable securities from 50% of their market value to 75%.[38] The long-drawn-out question of the revaluation of long-term national, State, and municipal bonds as well as railroad and mortgage bonds was finally settled by a Supreme Court decision in the summer of 1925. These bonds were revalued at 15% to 25% of their old gold value and were opened to the lombard privilege at the Reichsbank. This further broadened the capital market.

Improvements in the costs of stock exchange operations such as the reduction of the stock turnover tax and the reduction of the commission charges by private banks were brought about at the instigation of the Reichsbank.[39] The stock market remained depressed throughout 1925 but began to show improvement early in 1926 and thereafter gained steadily. New issues of stocks and bonds remained small during this period as is shown in the following table.

37 Schacht, *The Stabilization of the Mark*, *op. cit.*, pp. 212-213.

38 *Ibid.*, p. 211. Also, *Annual Report of the Reichsbank*, 1925, p. 9.

39 The stock turnover tax was reduced gradually from twenty-eight per mille in Nov. 1924 to seven per mille on May 1, 1926. The pre-war charge had been two per mille. The brokerage commission charges were reduced gradually from 6% in October 1924 to 2.4% in October 1925 and to 2% in September 1926. See Schacht, *The Stabilization of the Mark*, *op. cit.*, pp. 194-195 and 202-203.

TABLE XLIII. DOMESTIC SECURITY ISSUES [a]

January 1925 to May 1926

(In millions of reichsmarks)

	Bonds	Stocks	Total
1st quarter 1925	338	265	603
2nd " "	346	142	488
3rd " "	158	154	312
4th " "	176	205	381
1st " 1926	447 [b]	99	546
Total	1,465	865	2,330

[a] *Vierteljahrshefte zur Konjunktur Forschung,* 1926, Part 1, p. 44.

[b] 100 million reichsmarks of this amount represented the agricultural mortgage bonds mentioned above.

Savings deposits increased from a total of 1,389.3 million reichsmarks at the end of September 1925 to 2,044.6 million at the end of March 1926.[40] The total deposits, current account, and acceptance liabilities of ten German Great Banks increased from 4,453.5 million reichsmarks at the end of February 1925 to 6,033.4 million at the end of February 1926.[41] Thus, at the end of the long period of credit restriction and rationing, the German economy had taken strides toward reorganization and rebuilding. And at the center of this process one finds the Reichsbank guiding, urging, sometimes cajoling and sometimes forcing the German economy along the paths that it considered desirable.

Rigid restriction of central bank loans and discounts belonged only to the first phase of the policy of the Reichsbank and was a severe part of the " purging " process. No doubt its object was as much to teach a lesson as it was to hold the currency stable. Its psychological effect on the German economy was similar to that of a parental spanking. Thereafter the re-

40 *Vierteljahrshefte zur Konjunktur Forschung,* 1926, Part IV, p. 121.

41 *Ibid.,* Part I, p. 43.

striction of credits became the means through which the Reichsbank guided available funds into specific channels, and promises of relief from restriction proved to be an effective tool in the rebuilding and reorganization of the German economy. From the autumn of 1924 to May 1, 1926, when the last vestige of restriction and rationing disappeared, the maintenance of restriction undoubtedly gave to the central bank a strong bargaining position. An evaluation of Reichsbank control policy during this period, therefore, requires that emphasis be placed upon the qualitative aspects of credit rationing.

From the purely quantitative standpoint, it is impossible to determine whether more or less credit was available to the German economy under credit restriction than would have been available under control through bank rate. Maintenance of currency stability would have been the main objective of the Bank with either technique of control. The limits placed upon the central bank in the Bank Act of August 1924 required the Reichsbank to hold a certain amount of bills, gold and foreign exchange for note cover; these provisions of the law forced the Bank to restrict its own lending policy whether through the strict quantitative device of bank rate increases or through the qualitative device of rationing. There is no evidence that domestic bills suitable for rediscount would have been created any more rapidly under bank rate control than under rationing.

The objectives of the Reichsbank in its restriction and rationing policy (aside from currency stability, which was always the prime objective) were directed toward: 1) purging the economy of the last vestiges of speculative fever, and bringing home the fact that only through the severest retrenchment could a healthy base for the German nation be fashioned; 2) rebuilding the money market and particularly the private discount market; and 3) rebuilding the capital market.

A belief on the part of the central bank that purging was essential led it logically to its position that some industries were more desirable than others and that all industries had to learn the lesson of poverty. There were thus two aspects of rationing. The one was the desire to weed out the inflation industries that were non-essential, such as the over-developed middleman, and to bring about reorganization of industrial units on more organic lines; the other was to force all industries to face squarely their own reorganization problems especially those forced upon them through capital shortage. The Reichsbank seems to have been justified in its interpretation of the post-inflation ills of the German economy. It was also the one institution in Germany in a position to use force to accomplish its ends. The situation in 1924 and 1925 was abnormal; the technique employed to control it was drastic and painful. However, it seems evident that the firm stand taken and maintained by the Reichsbank was one of the strongest factors that prepared the way for the relative prosperity of the later years. To hold that the restriction and rationing policy of the Reichsbank completely attained its ends is obviously unsupportable. In spite of the fact that we have no information as to the actual methods employed to ration its loans and discounts, it is probably true that many worthy industries suffered undue hardships or were even forced into bankruptcy because of lack of credit. This was more true in the first phase of credit restriction than in the later phases. Nevertheless, by the beginning of 1926 no signs of speculative fever remained. Industry had begun the process of reorganization and rationalization that was to prove to be the path to success in the next few years, and the industries that had survived restriction and business depression were in a sound financial condition which permitted them to make the most of new opportunities. It is, of course, not being suggested that the Reichsbank was solely responsible. But the Reichsbank had the vision and the courage to formulate for itself the ends it considered desirable and to refuse to deviate from those ends.

The rebuilding of the money market made steady progress under the policy of credit restriction. The method employed by the Reichsbank—the centralization of public money through exemptions from credit restriction—gave it the power to direct funds into specific uses. Funds were generally directed toward the rebuilding of the private discount market. The abandonment of discount rate as a tool of central bank control had separated bank rate from money market interest rates so that it was in no sense in a position to lead the market. The cheapening of money market interest rates, which took place during 1924 and 1925, was only to some extent due to the Reichsbank's efforts to centralize public money; to a large extent other factors entered in, such as foreign funds and the increasing liquidity due to depression. At the end of the policy of credit restriction the money market, although far from assuming its pre-war place in the German economy, was unmistakably stronger. Only little progress was made toward the rebuilding of the capital market and such steps as were taken were not necessarily a part of credit restriction and rationing. The technique employed seems to have been an efficient tool of qualitative control. The currency was held stable throughout two critical years, and the shattered structure of the economy was well on the way toward rebuilding when the Reichsbank finally gave up credit restriction in favor of control through discount policy. No doubt the application of credit rationing was difficult, often evaded, and perhaps even misguided. Dr. Schacht in speaking of this period of credit restriction says:

> I never concealed from myself that credit rationing was an extremely imperfect and undesirable form of action for a bank of issue, and I trust that it may never be necessary to have recourse to it again. But extraordinary situations call for extraordinary remedies, and cannot always be mastered by the theoretical rules evolved for normal conditions.[42]

Credit Restriction, May-June 1929

The Reichsbank considered itself forced by "extraordinary situations" to apply the "extraordinary remedy" of credit restriction on two subsequent occasions—during the run on the German currency in the spring of 1929 and during the summer

42 Schacht, *The Stabilization of the Mark*, *op. cit.*, p. 203.

crisis of 1931. On both of these occasions the objective of the Bank was to maintain the stability of the reichsmark and to protect its own gold and foreign exchange position.

The 1929 run on the German currency has already been discussed.[43] The decision to control the alarming withdrawals of gold and foreign exchange through the restriction of central bank loans and discounts rather than through discount rate increases was undoubtedly conditioned by the flight of domestic capital and the increase in hoarding. The *Annual Report of the Reichsbank* for 1929 makes this clear:

> The lack of confidence became more and more manifest; and the demands made upon the home market for credit outgrew economic requirements as a result of the desire to purchase and hoard foreign exchange. In such circumstances it seemed that the application of the discount rates as a controlling factor had lost its efficiency; early in May, therefore, the Reichsbank unfortunately saw itself compelled to have recourse once more to the restriction of credit as a means of control. The Managing Board of the Reichsbank are, however, well aware that restrictions always constitute a menace to economic development and deprive industry of the smooth working of those services which it is the task of the currency to perform; hence the adoption of such an extreme measure could be justified only by the fact that Germany was otherwise impotent to cope with the pressure put upon her by foreign countries and saw confidence wavering at home.[44]

It must remembered that the tool of credit restriction operates directly and rapidly on the commercial banks and forces them to assume individually the burden of meeting cash demands. In a country such as Germany, with a highly integrated banking system accustomed to dependence upon the central bank for all extraordinary cash demands, the sudden removal of this cash reservoir forces the banks to scrutinize their loans more carefully and to lend for shorter periods. It also forces

43 See above, Chapter VI, pp. 203-206.

44 Page 4.

banks and businesses to draw upon their own hidden reserves to meet their immediate liabilities. If there is reason to believe (as there always has been in Germany) that large hidden reserves exist, credit restriction is a surer method of drawing them out of hoarding than discount rate. There is no doubt in anyone's mind as to the amount of central bank credit that can be got; there is no possibility of delay or of shifting the burden to someone else; there is no weighing of relative costs of two or three possible lines of action. Banks and businesses must themselves find resources to meet their maturing liabilities. If a sudden sharp crisis is to be met at all it must be met with decisive and swift action.

On May 7, 1929, the Reichsbank announced that it would grant no further loans and discounts and that it would decrease its total discounts as outstanding obligations were repaid to a point where "the demands for credit were once more confined to the genuinely economic requirements of the market."[45] During this run on the reichsmark, the Reichsbank lost in two months (March and April) about one and one-half billion reichsmarks of gold and foreign exchange. The covering for notes in circulation stood at 41% (the lowest point since stabilization) on the day that credit restriction was announced.[46]

The effect of credit restriction on the Reichsbank was to check the withdrawals of gold and foreign exchange, and by the end of May its holdings had materially increased. The successful conclusion of the Young Conference at the end of May seemed to allay foreign fears to some extent so that not only was the domestic flight of capital checked, but foreign capital began to return to the German market. The bill portfolio of the Reichsbank decreased during May and June (see Chart I-B, p. 52) and there was a material decrease in the length of time of discounted bills. In its annual report the Reichsbank summarizes the results of its policy as follows:

45 *Annual Report of the Reichsbank*, 1929, p. 4.

46 *Vierteljahrshefte zur Konjunktur Forschung*, 1929, Part II, p. 6.

Thus, especially as the progress made in the negotiations at Paris helped to improve the general situation, the goal aimed at in restriction was soon attained. The stocks of gold and foreign exchange in the Reichsbank began to increase, and by the end of May, the demands made for credit had ebbed to a point which it could approve without risk. Little by little the restrictive measures lost their meaning and, by the middle of June, had disappeared.[47]

The effects of this period of credit restriction on the German economy cannot be compared to those of the first period of restriction in April to July 1924. The money and banking system was better able to stand the shock in 1929 than in 1924 and the economy had built up reserves to depend upon. The total deposit and acceptance liabilities of ten Berlin Great Banks decreased by 357 million reichsmarks from the end of April to the end of May. As was to be expected, there was a shift toward greater liquidity. In the same period of time, bills and checks decreased by 219 million reichsmarks, advances against goods by only 4.1 million reichsmarks and debtors in current accounts by 101 million reichsmarks.[48] This effect was comparatively slight compared to total deposits of more than ten billion reichsmarks but was sufficient to indicate the immediate change in lending policy. It is impossible to discover to what extent hidden bank reserves were drawn upon.

Money market rates of interest also reflected the struggle for greater liquidity. Daily money jumped 2.44% in the month of May, and monthly money, 1.68%. The first effect of restriction on these rates was, as it had been in April 1924, to cause their increase and to increase the demand for daily money more rapidly that the demand for monthly money. The June figures again compare favorably with the secondary effect of credit restriction on money market rates in the former period. As banks readjusted their investments, daily money became easier and monthly money became relatively scare. In June, rates for

47 *Annual Report of the Reichsbank*, 1929, pp. 4-5.

48 *Vierteljahrshefte zur Konjunktur Forschung*, Part III, p. 72.

daily money dropped by 1.27% as compared to their May average, while monthly rates continued to rise slightly.

The full economic effects of credit restriction that one might expect in a longer period had no time to develop in the six weeks of this period. The index number of wholesale prices declined by 1.6% in the month of May, but it had declined by 2.5% in April, prior to the application of credit restriction. The index number of production, however, decreased by 4.6% in May, whereas it had shown an increase in the previous two months. There is no doubt that credit restriction not only stopped new industrial development, but also forced curtailment along many lines. The German economy had been showing signs of slow retrogression throughout the latter part of 1928 and the early part of 1929 which developed into full-fledged depression in the summer of 1929. These signs were present in Germany before May 1929, and the decline in business activity was a part of the world depression. The credit restriction policy of the Reichsbank may have hastened the inevitable business collapse, but even this is doubtful.

On the whole, it seems evident that credit restriction in this instance was an effective and quick method of achieving the Reichsbank's objectives and that these ends were achieved without undue hardship to the Germany economy. Credit rationing in this instance was not an important part of restriction. The Reichsbank simply stopped discounting bills on May 7 and thereafter gradually curtailed its total allotment of credit. No doubt it made exceptions for certain industries, but the banks were able for the most part to care for their own customers. The pressure, therefore, fell directly upon the banks and through them was relayed to private entrepreneurs. Because of the severity of the crisis and the threat to the currency if international political considerations were allowed to continue to affect gold and foreign exchange withdrawals, the Reichsbank was justified in taking drastic measures to protect its own position.

Credit Restriction Policy

Credit restriction was totally incapable of controlling the summer crisis of 1931. It was only one control device among many and was resorted to in order to protect the currency in the face of rapid withdrawals of gold and foreign exchange. On June 13, 1931, the Bank raised its discount rate from 5% to 7%. On June 15, it began limiting its bill discounts, but at first only slightly. After losing 150 million reichsmarks of gold and foreign exchange in one day (June 18), drastic measures of credit restriction began to be applied which extended even to the suspension of bill transactions in the private discount market. By this time the flight of domestic capital had become apparent, and it was evident that domestic hoarding of foreign exchange was taking place on a wide scale. Credit restriction is the device best suited to check the hoarding tendency, but in this instance, while it undoubtedly forced banks and business men to use all of their available reserves, it failed to prevent a domestic run on the German banking system. As the crisis continued and intensified, the efforts of the Reichsbank were shifted from its desire to protect the gold and foreign exchange coverage of the currency to the necessity of supporting the domestic banking system.

As soon as it became evident that some means had to be found to convert bank deposits into cash, the question became not one of restricting central bank credit but of devising ways of broadening the discount and lombard privilege as far as possible. Therefore, after the reopening of the German banks, credit restriction was gradually abolished until by August 1, 1931 the last vestiges had disappeared. Foreign exchange control remained in the hands of the Reichsbank, but for other types of cash the central bank stood ready to grant unlimited loans and discounts.

The Reichsbank's use of credit restriction and credit rationing in the post-war period is one of the few examples of the application of this technique of central bank control. Curiously enough, in point of time credit restriction is much older than discount rate. It was first used by the Bank of England in 1795 when the rediscounting system had broken down as a result of the crisis of 1793. Since the Bank was relieved of the necessity of redeeming its notes in gold in 1797, however, the reason for restriction seemed to have been removed, and England entered upon the era of bank note expansion of the Napoleonic War period. In 1839, with the abolition of the usury laws, the Bank of England was able to use discount rate increases as a control technique and thereafter relied solely upon this quantatitive device which was more compatible with current economic thought than the device of the restriction and allotment of credit.

Credit restriction was used only once more, as far as is known, in the pre-war period. In 1912 and 1913, the Reichsbank restricted its rediscounts of bills in an effort to force the commercial banks to achieve and maintain a greater degree of liquidity. The practicability of credit restriction was demonstrated to the Reichsbank at this time and at least one highly significant analysis of this technique of control came from the experience. Plenge, in his book *Vom Diskontpolitik zur Herrschaft über den Geldmarkt,* analyzed the effects of restriction on the money market and on the power of the central bank, and came to the conclusion that for special purposes or special emergencies it was an excellent control technique. Although Plenge carried on his analysis on the basis of the relationship between cash and bank credit creation and confined his conclusions to the obligation of the central bank to maintain liquidity in the banking system, he undoubtedly realized the possibilities of extending credit restriction to the attainment of other central bank objectives. The basis was thus laid in Germany for the use of credit restriction in the crises of 1924, 1929 and 1931.

The Bank of France and the Bank of Italy have experimented with credit restriction, but the use of this technique by the Reichsbank seems to be the outstanding example in the history of central banking. The results to be expected from the use of credit restriction will probably differ in different economies even more than the results to be expected from bank rate changes. The integration of the banking system, the organization of the money market and the degree of dependence of the commercial banks on the central bank are all factors vitally important to an understanding of the operation of credit restriction in particular economies. Credit rationing, which generally goes hand in hand with restriction, requires the direction of credit into specific channels in accordance with broad social and economic objectives. Standards here will differ from nation to nation and from time to time. Whether or not it is possible to ration credits successfully waits upon future experimentation for final answer. Credit restriction and credit rationing seem to be devices full of potential power to a central bank that conceives its task to be "control for a public purpose."

CHAPTER XI

OTHER CONTROL POLICIES

Discount policy and foreign exchange regulation were the two techniques of central bank control relied upon most consistently by the Reichsbank in the decade under discussion. Credit restriction was an emergency technique used in the crisis of the reconstruction years and in the monetary crises of 1929 and 1931. As we have seen, however, the objectives of the Reichsbank were broadly conceived and their attainment frequently lay outside of the control power of the central bank. The Board of Directors of the Bank were aware of many dangerous tendencies in the German post-stabilization economy and were quick to issue warnings against unhealthy developments.

Warning became a fourth technique of central bank control. Three uses of this control device can be distinguished: (1) warnings backed up solely with publicity in fields where control lay wholly outside of the province of the central bank; (2) warnings combined with positive action either alone or in cooperation with the government; (3) warnings accompanied by threats of drastic central bank action unless the dangerous tendency was modified. The first method relied upon psychological effects to produce results and it is difficult, if not impossible, to determine its precise effectiveness in any particular instance. The poverty of Germany and the need for caution in all kinds of expenditure was played upon as a constant refrain. The need for the reorganization of German industry was pointed out and widely publicized. The necessity for the conservation of raw materials because of Germany's loss of territory and colonies became the topic of frequent public addresses of Dr. Schacht and other members of the Reichsbank Board of Directors. Then, too, the Reichsbank was one of the first to point out the dangers inherent in the scattered, inefficient, and burdensome tax system of Germany and every effort toward reform on the part of the government and the States was encouraged. Scattered and burdensome taxation was not solved by Germany in the ten years under discussion although some steps toward reform were taken in 1928. The inefficiency of tax collections rested partially upon the necessity of piling up large cash accumulations in advance of spending because the government was not permitted to finance itself through short-term bill issues in anticipation of tax receipts. This the Reichsbank considered undesirable because it interfered with private capital accumulations and the large cash funds encouraged ill-considered public spending. In 1926 the Reichsbank had its own Bank Act amended so as to permit it to grant short-term loans to the Reich up to 400 million reichsmarks. As a part of the tax reforms initiated in 1928, the government began to issue short-term bills which not only obviated the necessity of piling up large government reserves in advance of spending but also gave the Bank some check upon the use to which the funds were put.

The second and third uses of warning as a control device are best illustrated in the former case by the Reichsbank's warnings against long-term borrowing in foreign markets and in the latter case by its attitude toward the stock market in the spring of 1927. In both of these cases the Reichsbank was not only warning of the inherent danger but also was attempting to bring the situation directly under its own control.

We have had occasion to refer frequently to the attitude of the Reichsbank toward foreign loans. In general, the Reichsbank admitted the necessity for the quick replenishment of working capital from foreign sources, but clung to the belief that Germany was basically poor and that only the wisest possible use of all funds, domestic and foreign, could rebuild a strong economic base for the nation. Since domestic capital accumulation was extremely slow, the use of foreign funds received greater emphasis and became a cause of constant care and worry to the Reichsbank. Aside from its desire to instil the need for caution in all spending into the minds of entrepreneurs and public bodies, foreign borrowing was frowned upon because of the foreign exchange problems connected with the service and amortization charges on these loans.

Two aspects of foreign borrowing which most concerned the Reichsbank were the use of short-term loans for long-term uses (a problem that was not peculiar to foreign funds), and the long-term borrowing of the Reich, the Federal States and the Communes. The former problem was the subject of constant warnings but was never brought under the control of the Reichsbank. The Reichsbank attempted to control the latter problem through the establishment of an Advisory Bureau for Foreign Loans.

It was in the year 1925 that the government, at the instigation of the Reichsbank, established the Advisory Bureau for Foreign Loans (*Beratungstelle*). This Bureau had the right to pass on all foreign long-term loans requested by public bodies, but it had no control over short-term public borrowing except in the case of small cities and associations of villages. Although the Reichsbank was responsible for the creation of the Advisory Bureau, it had no more power in enforcing its will on the committee than any other member. The attitude of the Reichsbank toward foreign borrowing was unpopular in Germany and it was seldom possible for the Bank to persuade the other members of the committee to follow its advice in regard to foreign funds.

It is impossible accurately to estimate the effect of this Bureau on Germany's total foreign indebtedness. In the first two years of its existence, there was a tendency for a large proportion of industrial foreign borrowing to be done either through the banks or through the cities and States. The cities and States either guaranteed the interest payments on foreign loans for private entrepreneurs, or borrowed directly in their own names and granted loans to industry out of the proceeds. The cities, of course, borrowed for their own commercial purposes, as well as to subsidize private industry.

The activity of the Advisory Bureau for Foreign Loans is shown in Table XLIV. Out of a total of 3,732.3 million reichs-

TABLE XLIV. BUSINESS OF THE ADVISORY BUREAU FOR FOREIGN LOANS, 1925-1928 [a]

Classes of loans	1925 in millions reichsmarks			1926 in millions reichsmarks			1927 in millions reichsmarks			1928 in millions reichsmarks		
	Asked for	Granted	Not granted	Asked for	Granted	Not granted	Asked for	Granted	Not granted	Asked for	Granted	Not granted
Municipal loans	445.9	288.4	157.5	445.2	172.9	272.3	185.6	108.8	476.76	961.8	359.9	601.9
State loans	151.2	138.6	12.6	313.3	270.6	42.7	141.3	141 3	—	84.0	84.0	—
Agricultural loans	10.0	10.0	—	105 0	105 0	—	336.0	336.0	—	231 0	214.2	16.8
Loans for industrial entrepreneurs with public guarantee ..	88.2	88.2	—	152.8	144.4	8.4	81.0	50 4	30.6	—	—	—
Total	695.3	525.2	170.1	1,016.3	692.9	323.4	743.9	636.54	107.36	1,276 8	658.1	618 7

[a] *Die Reichsbank, op. cit.*, p. 85.

marks requested, in the four years represented, 2,512.74 million reichsmarks or 67.33% were granted, and 1,219.56 million reichsmarks or 32.67% were refused. Also, of the four types of loans, the municipal borrowings were not only largest in amounts demanded but largest in amounts denied. Of the municipal loans requested 54.38% were refused by the committee. Only 12.47% of the State loans requested were refused by the committee, 2.5% of the agricultural loans, and 12.1% of the industrial loans with public guarantee. Agriculture, therefore, seems to have been most favored and the cities most discouraged. The policy of the Bureau was to grant municipal loans only for the building of gas, water and electric light concerns and for the improvement of transportation and communication facilities. As this became known, public borrowers began to request from the Bureau only loans that had a fair chance of being granted and to devise other means of finance for the rest of the expenditures that were not subject to official check.

In the first year of its existence, the Advisory Bureau for Foreign Loans had very little power. It usually considered only the specified request and had incomplete information as to the total indebtedness of the public body, its budget income and expenditure, and plans for repayment. In 1926, after repeated protests by the president of the Reichsbank, the powers of the Bureau were enlarged so as to require from the cities and States more complete information. It must be remembered, however, that during these years the question of national, State, and municipal taxation was complicated by the failure of the national government to straighten out the whole tax system, so that it was not known just how far cities and States could go in tax-levying programs. Also, although the cities and States were required to furnish information in connection with specific requests for *foreign* loans, there was no obligation upon them to deal with the Bureau for other types of finance. Their own total expenditure was not necessarily reduced nor was total long-term foreign borrowing, either public or private.

Two types of shifting were possible. In the first place the cities could shift their borrowing to direct long-term loans in the domestic capital market, thus forcing industrial borrowing in foreign markets, and in the second place they could shift their own loans to indirect foreign borrowing through banks. The power of the cities to float long-term bonds in the domestic market was limited in the first two years by the inability of the capital market to absorb any large amount of these loans. After 1927 there was enough improvement in the German capital market to make it possible for the States and cities to float some long-term issues successfully. Since private industry was also badly in need of foreign capital and since domestic savings were still far behind demand, private industry was undoubtedly forced into greater foreign borrowing than might otherwise have been necessary.

The Reichsbank was well aware of this. It attempted first to induce the government to place all foreign long-term borrowing, both public and private, under the control of the Advisory Bureau. Unsuccessful in this attempt, it used its influence as a member of the Bureau to force the Bureau to discourage all public long-term loans on the grounds that public spending is necessarily less productive than private spending. In this also the Reichsbank was unsuccessful and permission continued to be granted for certain types of public foreign loans. It seems probable that in the first two years of its existence, the Advisory Bureau for Foreign Loans succeeded in reducing the total long-term borrowing of the cities and States. Later, however, total long-term public issues increased and the activities of the Bureau were useless, perhaps worse than useless. That the Reichsbank saw the evil and warned against it does not alter the fact that it was unable to control public long-term foreign borrowing.

The second type of shifting which undoubtedly took place was the shifting of borrowing from the long-term market to the short-term market. As the cities found themselves unable to borrow long-term capital in sufficient amounts either in the domestic market or in the foreign markets, they began to supply their needs through short-term treasury bills discounted with the banks. The banks in turn shifted a portion of this type of finance into foreign markets. The banks were frequently able to borrow long-term funds on the security of municipal and State treasury bills or even to float bonds backed by such bills in the foreign markets. This type of insecure public finance with bank support was not revealed in all of its ramifications until after the banking crisis of 1931. It will be remembered that as a part of the Government's plan to rebuild the German economy after the bank failures of 1931, a lowering of all domestic interest rates was ordered in December 1931. At this time cities that had borrowed from the banks on the basis of short-term treasury bills claimed the privilege of the lowered domestic rates. The banks, however, having borrowed for the cities in foreign markets on the basis of these same bills, were forced to pay the higher rates on their foreign borrowings, which, of course, were not subject to the domestic decree. The banks claimed that the cities, knowing that the banks were acting only as intermediaries in foreign markets, were bound to pay the original interest on all treasury bills which had been pledged by banks as the security for foreign loans. This situation led to a long legal controversy. The effect of the bank reorganization of 1932 was to make the Government owner or part owner of practically all of the commercial banks of the country. The Government's interest as a banker was, of course, to collect from the cities, whereas its interest in the reorganization of public finance and lowered interest costs was to hold the banks responsible for former unsound practices and to enforce its own decree. The complicated financial tangle has not yet been worked out satisfactorily, although there seems to be a tendency to hold cities directly responsible wherever possible on the ground that they were well aware of the fact that they were using roundabout and unsafe means to escape Government supervision of the use of funds.

It is unfair, of course, to blame the activities of the Advisory Bureau for Foreign Loans for the unsound public finance of the German States and cities in the post-war period. It is frequently alleged that the mere existence of the Bureau caused the cities to press more heavily on the domestic market for long-term funds than they otherwise would have done, and that it also caused the shift to private borrowing through the banks into foreign markets. To some extent both of these charges are true. There is no evidence that the activities of the Bureau succeeded in reducing the total expenditures of the States and communes. As far as long-term capital demands were concerned, in the years 1925 and 1926 some total decrease may have resulted from the Bureau's refusal to grant loans, since the domestic capital market was incapable of supplying the needs. It is more likely, however, that the cities as well as private industry turned to the banks for support, as the failure of the German capital market to resume its old place in the economy became more and more apparent. Whether or not this type of finance was any greater than it would have been had the Bureau not existed is, of course, idle speculation.

At best, the activities of the Advisory Bureau for Foreign Loans may be dismissed as ineffective. The Reichsbank seems to have been justified in its belief that public expenditures should be reduced to a minimum consistent with sound taxation and non-luxurious spending. The control over public foreign long-term borrowing was such a small part of the whole problem that the effect of the Bureau on the total situation was negligible. This is one of the examples of control activity on the part of the Government and of the Reichsbank that either should never have been attempted, or, if attempted, should have extended much further than it did. The Reichsbank was in favor of extending the control powers of the Bureau, but it was never successful in persuading the Government to increase its powers to include all aspects of the problem of the reorganization and control of municipal and State expenditure.

The third type of warning—that backed up by threat—was used by the Reichsbank for the first and only time in connection with stock market control. The basic objective was to force greater liquidity upon the German commercial banks. If the Reichsbank sent out frequent warnings in regard to foreign borrowing, it was almost equally active in warning the banks of the need for greater liquidity. In May 1927, it not only warned the banks of the necessity of becoming more liquid, but also ordered them to do so or to submit to credit restriction. It will be remembered that in the latter half of 1926, the German short-term money market was extraordinarily liquid because of the presence of large amounts of foreign funds, and because industrial activity was still sluggish. The banks began to use some of their surplus funds to finance the purchase of long-term bonds which were selling at attractive rates. Gradually the capital market felt the effect of greater activity in the bond market; this effect began to be transmitted to the share market and stock prices increased. There was an increased demand for daily money and monthly money on the bourse but especially for report money.

Early in January the Reichsbank reduced its discount rate to 5% in an attempt to discourage foreign funds. For seven or eight weeks there was a noticeable falling off of foreign short-term deposits available for use in the German market, but in spite of this the surplus funds in the banks were sufficient to continue an active bourse lending policy. In March 1927, the Reich floated a 500-million reichsmark bond issue which temporarily tightened the market and caused a sharp increase in money market rates of interest. German rates for daily and monthly money again attracted foreign funds, which the banks continued to use on the stock market at the same time leaning heavily upon the Reichsbank for discount credit. A lowering of the discount rate at this time would have encouraged this dependence on the note bank and at the same time would have had no discouraging effect upon foreign funds which were the real support of the stock market boom. An increase in the discount rate, which would have theoretically tightened domestic credit would have further aggravated the foreign inflow. It must be remembered, too, that tightening the money market through the sale of the Reichsbank's holdings of foreign exchange in return for cash was not possible at this time because there was a heavy drain upon the Reichsbank for foreign exchange due to the large adverse trade balance, service and amortization charges on foreign loans and reparations.

The Reichsbank sent out frequent warnings to the banks during March and April against their continued dependence upon central bank support for stock exchange commitments, but these warnings were not heeded. Finally, on May 11 the Reichsbank called in the member banks of the *Berliner Stempelvereinigung* and announced to them that they would have to put their affairs in a more liquid position, or the Reichsbank would once more resort to credit restriction.[1]

This action of the Reichsbank has been bitterly condemned and enthusiastically praised in Germany. The Reichsbank's action was undoubtedly conditioned by its belief that foreign short-term borrowing (particularly for stock market speculation) was dangerous for the safety of the commercial banking system. There was not at this time (as there was later in 1929) any real threat to the stability of the reichsmark. Nevertheless, there was an increasing tendency for the banks to depend upon central bank support. The Reichsbank felt that the increase in the stock market was out of line with any real improvement in German business. Although there was a noticeable recovery in business, the spring of 1937 still retained depression earmarks and legitimate business was increasingly in need of bank credit. The decisive action of the Reichsbank in May 1927 must be looked upon as one other example of qualitative interference in the credit life of the nation. Stock market speculation was successfully checked and for the time being, at any rate, the German banks were forced to become

1 See Chapter V, pp. 192-193.

more liquid. In this instance the control technique of the Reichsbank was wholly successful and, although the results for the stock market were disastrous, the economy as a whole quickly overcame the stock market panic and went on to further prosperity.

A fifth technique of control which the Reichsbank frequently used was bargaining. Bargaining, of course, is effective only if the central bank has something desirable to offer in exchange for the action or policy it attempts to promote. As was to be expected, therefore, it was used to best advantage during the first and longest period of credit restriction although it was also effective in December 1929 in forcing the government to greater economy of expenditure.[2]

Exemptions from credit restriction and the admission of certain types of bills to the rediscount privilege (through the Gold Discount Bank) made it possible for the Reichsbank to mobilize public funds in the service of agriculture and in the rebuilding of the private discount market. Public money was of prime importance in Germany in the immediate post-stabilization period and was for a long time the only source of capital available for expenditure. Public money refers not only to the funds at the disposal of the government, the State and the municipalities from taxation but also to the social insurance funds, the postoffice, the income from State-owned railways, waterworks and the like. These public activities in Germany always have been of much greater significance than they have in the United States.[3] These public moneys in Germany in the pre-war period were centralized under Government and Reichsbank control. During the war they were, of course, used for war purposes. But during the inflation and the immediate

2 See Chapter VI, p. 211.

3 The recent growth of social security payments in the United States is bringing to the fore the problems connected with the use of such funds. This country has not yet developed the public ownership and operation of utilities to anything approaching the German pre-war development.

post-stabilization period they were administered by the separate departments without much regard for anything except immediate profit. The lending of railroad money, for instance, at the fantastically high interest rates prevalent in the early months of 1924 meant not only that public money was encouraging the revival of a speculative boom but also that the attempts of the Reichsbank to cheapen credit were impeded and nullified. The Bank took the position that all such funds should be loaned only at the lowest rates in the interest of the whole economy.[4] To some extent, the Reichsbank succeeded in making deals with the *Verkehrskreditbank* and with the *Reichs Kredit Gesellschaft*. These have already been discussed.[5] In other cases, the Bank was successful in obtaining the deposit and administration of certain funds in return for concessions in discount and lombard privileges on municipal and state loans or on industrial loans guaranteed by the States and municipalities. In addition, money market banks holding large public deposits were often willing to use these funds in the way suggested and at the rates suggested by the Reichsbank in return for exemption from credit restriction. Although the centralization of these funds under Reichsbank control was never wholly accomplished, as the economy slowly revived from the effects of stabilization and as new sources of capital developed the problem became less pressing. The largest public banks cooperated more and more with the Reichsbank and in 1928 the Government lent its support to the reorganization and the financial consolidation of its own separate departments.

One final tool of control was used by the Reichsbank. Publicity at all times and at all places and in connection with every aspect of German economic life that the Bank considered vicious, unhealthy, or undesirable was resorted to without stint. The danger of reckless public spending, the essential poverty of

4 Schacht, *The Stabilization of the Mark, op. cit.*, pp. 197-202.

5 See Chapter II, p. 65, and Chapter X, pp. 342-344.

Germany, the uneconomic use of foreign funds—these were all unpopular causes. Perhaps the very insistence of the Reichsbank defeated its own ends. Certainly it was in no measure successful in checking or correcting these basic weaknesses.

"I believe firmly in a policy of credit control as contrasted with a policy of laissez-faire in monetary affairs; but I conjecture that for a long while to come credit control may prove a more difficult matter than some of its more ardent advocates would lead one to suppose, and that it may have to be envisaged ultimately not as an independent panacea but as one ingredient in a much more arduous and comprehensive programme of stabilization."

D. H. ROBERTSON,

Banking Policy and the Price Level.

CHAPTER XII

CONCLUSION

Two factors complicate any evaluation of the objectives and techniques of central bank control as developed by the Reichsbank in the decade 1924 to 1933. The first is the extent to which political considerations dominated economic life in the decade of the twenties and the second—partially an outgrowth of the first—is the structural disintegration that was taking place in international economic relationships. A third factor should probably be added—the naivete with which public officials everywhere continued to cling to and uphold the old beliefs upon which they had been brought up while deliberately destroying the very bases of those beliefs. It is this latter factor that confuses any economic analysis of the years from 1918 to 1931 and casts over the entire period an aura of unreality. It was a period in which actions and words bore little or no relationship to each other and if one tries to force a relationship, the actions seem deliberately blind or the words incredibly stupid.

Political non-interference in economic "laws" was taken for granted in the pre-war days. To be sure, economic theory always has been bothered to some extent by the exogenous changes—that is, by those factors outside of the economic system that force changes in the internal relationships within the economy itself. As long as exogenous happenings were slight, however, it was possible to speak of an economic system *as if it were* a self-contained entity, capable of disturbance only from factors within itself. Outside interference could come only from acts of God (about which little could be done) and acts of man—particularly in his collective capacity—the state. Slogans grew up to aid in extending and protecting the belief in the self-regulatory nature of the economic system such as—"non-interference with economic laws", "economic forces should be permitted to govern economic life" (within ethical limitations), and even "natural law" was adopted as an "economic force". The economic slogans were used to scare away the politicians and therefore to reduce to a minimum the likelihood of exogenous changes. The happiest belief of all, of course, and that most easily understood was that if one played in accordance with the rules of the economic game it was all for the best and in the national self-interest.

It is not necessary here to review the changes brought about in international economic relationships because of the last world war or the provisions of the Treaty of Versailles which tended to perpetuate and intensify those dislocations. The hatreds left over from the war and pressing national problems forced each nation into some degree of interference with the "economic forces" and above all gave political considerations dominance over the reconstruction of economic life. In any discussion of monetary management and development of central bank objectives and techniques the results of these dislocations stand out sharply.

Central banks have always been institutions created for some national purpose of public welfare but in the years before the war the theory upon which those banks operated was one that identified national and international money and credit interests. Pre-war central banks seemed to accept the theory that the greatest possible welfare for the national economy could be attained through permitting the money and credit mechanism to adjust itself to international gold and capital movements. This limited the objectives of the central bank to those consistent with the protection of the gold reserve, the guarantee of a sound and adequate currency, the provisions of discount and clearing facilities and the like. The techniques of central bank control were also confined to those that could force the money market into a more rapid adjustment than that which could be attained through the unaided gold-price-level mechanism.

In the post-war period central banks began to break with this tradition. In the face of currency depreciation, gold shortages and heavy internal and external debts, central banks were faced with new problems of providing sound and stable currencies, and of rebuilding shattered domestic money and capital markets. Each nation had different problems and no one nation was able or willing to take the lead in the rebuilding of the international gold system. The United States might have done so after 1918, but she did not. Stabilization of national currencies on the old or on new gold bases proceeded slowly. The integration of these money and credit systems into an international system was never accomplished. In 1931 the seams began to rip in the inexpert patchwork and by 1936 the last remnants of the pre-war gold standard had torn apart.

This shift from an international to a national point of view runs through the history of the Reichsbank in the period under consideration. The decade began with a burst of confidence that the pre-war international relationships were to be refashioned. The currency was stabilized on a gold basis; the Bank Act was rewritten in the traditional mold, making the central bank a place of rediscount and clearing and making it responsible for the circulation of money in the whole area of the Reich. The immediate objectives of the Reichsbank were designed to rebuild the German economy on the pattern of its pre-war structure, so that the normal operations of the money and credit mechanism could begin to function. Furthermore, the early years of the decade were years of hope for the entire world. England stabilized her currency in 1925 and France in 1926. The Dawes Plan was followed by Locarno. It was a period of relative economic prosperity, in which it was thought that real progress was being made toward that rebuilding of international political alignments recognized as essential to economic internationalism.

Although not realized at the time but all too apparent today as one looks back over the decade 1924-1933 is the fact that the structural changes in the post-war world were much more deep-rooted than was at first supposed and that the efforts to rebuild the pre-war economy were at best only half-hearted.

Thus, while giving lip service to the "good old days", new national problems occupied the immediate attention and nations were willing to make concessions only within the limits of self-determined standards of national welfare. Growing nationalism, the economic problems inherited from the war, and the complete failure to recognize the inner significance of separate "protective" measures are the underlying factors dominating the economic history of every nation in the decade of the twenties. Germany was to a large extent the victim of the world-wide decay. The Reichsbank was almost the first to recognize the significance of the structural dislocations in the international economy and to protest against the type of political action that interfered with any forthright attempt to rebuild a world economy. Germany's post-war economic problems were more immediate and more intense than those of any other large power. Germany's nationalism, flaming and intense by 1933, was from the economic standpoint non-existent in 1924. It is well to remember in the light of the political and economic changes wrought by the National Socialist revolution in Germany that the movement toward economic nationalism was first apparent in the victorious nations in the last world war. If one cares to believe in economic internationalism there is no room for political squeeze plays.

Much of the criticism one finds of the Reichsbank as the central bank of Germany is based upon analyses set wholly in terms of the old belief in non-interference with "economic forces". The distinctive characteristic of the Reichsbank in these ten years lay, however, in its very unorthodoxy. The Reichsbank constantly interfered with economic forces. It was most successful as a central bank where it was most successful in that very interference. It is futile to criticize the methods used to attain specific welfare objectives on the grounds that the whole undertaking of monetary management should never be attempted. It is equally futile to accept as desirable the pre-war minimum of control and to discard as undesirable every departure from that minimum. If one grants to central banks their right to exist at all one is forced to recognize that interference with economic forces has itself been set up as desirable.

In any discussion of central bank control the problem that must be solved is not the merit of interference versus non-interference with economic forces but rather the limits of monetary control itself. Is monetary management an " independent panacea ", or is it, as Mr. Robertson suggests, only " one ingredient in a much more arduous and comprehensive programme of stabilization? "[1] Furthermore, what are the limits of control for any one central bank seeking to attain national welfare objectives? In the absence of any comprehensive program of stabilization either on an international or on a national scale, how can monetary management alone be made as efficient as possible?

This study of the Reichsbank in the decade from 1924 to 1933 throws light on these problems but in no sense gives a definitive answer to any of them. The Reichsbank was the only institution in Germany with any comprehensive plan of stabilization during this entire period and it was unable alone to control the most dangerous elements in the economy. It was unable to control the flow of foreign funds or to improve the fiscal policies of the Reich, the States and the communes. It was unable to bring about an expansion of the export industries and to find foreign markets for an increasing amount of German goods. It was unable to solve the problem of unemployment. These are problems that lie outside of the limits of monetary management alone. In a larger sense they are problems that lie outside of the control of any one nation even if control is envisaged in much broader terms than those of purely monetary measures. The Reichsbank was aware of these dangers and warned against them but had no power to control or even to modify their effects. Its efficiency as a central bank

1 Dennis H. Robertson, *Banking Policy and the Price Level* (London, 1926), p. 4.

was nevertheless impaired by their existence and the problems usually held to be inside of monetary management were further complicated because of them.

The Reichsbank, however, accomplished much for the German economy during this period. It stabilized the currency and held it stable in the face of great difficulties; it rebuilt the money market and reasserted the control position of the central bank rediscount rate; it provided adequate and cheap money for legitimate trade, industry, and agriculture at a time when all working capital was badly impaired. It prevented stock market speculation at a time when such speculation threatened the gold and foreign exchange position of the Reichsbank. It forced some improvement in banking techniques and simplified the process of clearing and collection throughout Germany. In short, the Reichsbank was successful as a central bank in the very fields that are closest to monetary control and management. The stated objectives of the Bank and its actual accomplishments were for the most part set in the traditional pattern. Even the most orthodox can find little to criticize in the objectives of the Bank except, perhaps, in its desire to direct capital to " legitimate " industry.

The greater interest lies in a study of the techniques adopted by the Reichsbank. The traditional tools of control failed to work in the particular domestic and international conditions that faced Germany throughout the years 1924 to 1933. Deprived of an open market policy by the fears of foreign nations to allow the Reichsbank to deal in government securities, the Bank created the Gold Discount Bank and used it for open market purchases. Faced with a speculative boom and tightness in the money market early in 1924, the Reichsbank introduced credit restriction and took upon itself the responsibility of directing credit into desirable channels. Again, it used its lombard loan business as a bargaining device and granted this privilege slowly and always in return for some concession that it considered essential for the welfare of Germany. The Bank attempted to control foreign funds through the Advisory Bureau for Foreign Loans and through constant warnings against the overspending of States and municipalities. The stock market was threatened with credit restriction unless speculation ceased; the Government was denied central bank support unless it made more realistic attempts to balance the budget. Agriculture was granted cheaper and more plentiful credit through the Gold Discount Bank and through bargaining with money market banks.

Even limited objectives of credit control may require new and courageous techniques in particular situations. A central bank operating as the only control institution within the national economy is forced to limit its activities to those that fall directly within the limits of monetary management and even here its success or failure may be conditioned by the problems that lie outside of central bank control. Monetary management is not the sole answer to the wider problem of economic stabilization.

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